

BROOKER CREEK WATERSHED ALTERNATIVE BMP ANALYSIS

Prepared for:

Southwest Florida Water Management District
And
Pinellas County



Prepared by:



URS Corporation Southern
7650 West Courtney Campbell Causeway
Tampa, Florida 33607-1462

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Original December 11, 2009

PROFESSIONAL SEAL

I hereby certify that the report Brooker Creek Watershed Best Management Practices (L066) has been completed in accordance with the requirements and guidelines specified in the Southwest Florida Water Management District's - Watershed Management Program - Guidelines and Specifications for Watershed Management Plan (August 2002).

The attached engineering calculations and report were initially prepared by URS Corporation Southern (URS) in December 2009 within the limits prescribed by our client using standard engineering procedures in a manner consistent with the skill and level of professional care exercised by other professionals practicing in the same locality under similar circumstances. Information provided to URS by client representatives, agents and other consultants has been accepted in good faith and is assumed to be accurate.

The Southwest Florida Water Management District (SWFWMD) has revised and updated the December 2009 Report to this Final Report (May 2010) to include additional descriptions of the alternatives and modifications to the report format. URS can not certify the changes made by SWFWMD as work done under our responsible charge.

Signed: _____

Robert E. Johnson, P.E.

Registered Professional Engineer

Florida License No. 39521

Date: _____

5/25/10

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EXECUTIVE SUMMARY

Introduction

This report presents the results of a Best Management Practices (BMPs) alternative analysis for the Brooker Creek Watershed. The objectives of the BMP analysis were to evaluate BMPs that would improve the hydrology of wetlands in the Brooker Creek Preserve (Preserve) and provide more flood protection in the residential developments in the vicinity of Tarpon Woods Boulevard.

This BMP alternative analysis is the final task to complete of the three elements of the Southwest Florida Water Management District's Watershed Management Program: 1) Digital Topographic Information, 2) Watershed Evaluation, and 3) Watershed Management Plan. The watershed boundaries, storage, conveyance, flow paths and parameters have been developed and verified by field reconnaissance. A computer model of the entire Brooker Creek Watershed was developed and used in the analysis.

In response to a funding request from Pinellas County, the Pinellas-Anclote River Basin Board (Board) included funding for the Brooker Creek Watershed Management Program in its fiscal year (FY) 2004 and 2005 budgets. The Southwest Florida Water Management District (District) is managing the project by issuing work orders to URS Corporation Southern (URS) to complete the elements of the Watershed Management Program (WMP). The Pinellas County Department of Environmental Management is managing the County's interests, with assistance from Public Works.

Background

The Brooker Creek Watershed covers approximately 46 square miles and extends into Hillsborough, Pasco and Pinellas Counties. The majority of current land use within the Brooker Creek Watershed is rural and agricultural; however, increasing percentages of the land area are planned for residential community development, mainly concentrated around the lake chains of the upper portion of the watershed in Hillsborough County and in the lower portion of the watershed in Pinellas County. The majority of the watershed within Pinellas County is located within the Preserve and is undeveloped.

Runoff from the Brooker Creek Watershed drains into Lake Tarpon, the seventh ranked water body on the District's list of Surface Water Improvement Program (SWIM) priority water bodies. Restoring the hydrology and habitat of surrounding wetlands that have been degraded by flow alterations in the Preserve is one of the SWIM strategies to address the decline in water quality in Lake Tarpon. Conceptual BMPs that would restore degraded wetlands by increasing water levels during low water level periods were identified in the Lake Tarpon SWIM Plan (July 2001). Conceptual BMPs from the Plan were selected by the County for evaluation herein to provide the County with information about the costs, the potential benefits, and impacts.

Street and yard flooding has been an issue in the Toniwoods portion of the Tarpon Woods developments for many years. The Pinellas County Department of Environmental Management, Pinellas County Department of Public Works, Hillsborough County, the Tarpon Woods Action Committee (TWAC), Pinellas County residents (at a meeting on September 27, 2007), and District Engineering and Operations staff worked together to develop a list of conceptual BMPs that could reduce the duration and depth of flooding in and along the creek. In addition to the BMPs for the creek system, Pinellas County Department of Public Works is evaluating and implementing BMPs internal to the Toniwoods collection system as a separate project. Implementation of BMPs for the creek system and internal to the Toniwoods collection system are necessary to reduce flood stages and duration in Toniwoods.

Alternatives

Thirteen alternative BMPs were evaluated. The attributes of each are listed in Table E.1, and the locations are shown in Figure 1.0a through Figure 1.0c. One of the thirteen BMPs is in Hillsborough County (No. 6); the rest are in Pinellas County. Alternatives 1 - 3 are located on the west side of the Preserve and consist of filling ditches, constructing weirs, and adding culverts to allow the County to manage water levels and to maintain or restore historic flow paths in the Preserve. Alternatives 4 - 7 consist of diverting flood flows from Brooker Creek before reaching Tarpon Woods. Alternative 8 consists of increasing the capacity of the Brooker Creek channel in the vicinity of Tarpon Woods. Alternative 9 is filling ditches and adding low water crossings to restore historic flow paths along the east boundary of the Preserve. Alternative 10 is purchasing flood-affected properties in Toniwoods, which could be implemented instead of a BMP to reduce flood levels. Alternative 11 is performing channel maintenance between Ridgemoor Boulevard and Tarpon Woods Boulevard. Alternative C1 combines the elements of Alternatives 2 and 7. C2 is a combination of Alternatives 2 and 8.

Analysis

The BMPs were evaluated based on the following criteria:

- Cost - The implementation cost for each alternative is compared to the cost to acquire 22 flood-affected houses (Alternative 10). A BMP has a cost benefit if it costs less than implementation of Alternative 10.
- Environmental - A BMP has an environmental benefit if in the environmental systems, the historic flow paths are restored, the duration of flooding is extended, and/or peak stage levels are higher than existing conditions. Longer duration and higher stages are indications that there is the potential for managing water levels in wetlands during low flow periods. Environmental impacts are lowering of water levels in wetlands, destruction of wetlands, and causing flooding or changes in the flow regime off-site. Impacts are given qualitative designations of low, medium, and high depending on the nature, whether temporary or permanent, and extent of the impacts.

- Flood protection - A BMP has a flood protection benefit if implementation will lower the flood stages and reduce the duration of flooding in the main channel near Tarpon Woods Boulevard.
- Permitting – Permitting difficulty is designated as low, medium or high level of effort needed. A BMP that is difficult to permit is given a low priority for implementation.
- Land Acquisition – The difficulty in obtaining easements or land purchase was considered in assigning the priority for implementation. The designations of low, medium and high are used for the level of effort needed.

Ten of the thirteen BMP alternatives (1-8, C1 and C2) were simulated by modifying the existing conditions watershed model. For each of these BMP alternatives, model parameters were modified and the model was rerun for three storm events: 5-year, 25-year, and 100-year. The peak pre- and post-development flood stages were compared for all 3 events. The pre- and post-development flood stages were compared at day 4 after the beginning of the rainfall event as a measure of change in flood duration in the Preserve and Tarpon Woods. Four days was chosen as representative of the extent of drawdown for the different alternatives when compared to the existing condition.

Findings and Recommendations

This BMP analysis provides Pinellas County Department of Environmental Management and Public Works the benefits, costs, and issues to be addressed in planning future implementation projects. A summary of the findings and recommendations for each alternative is in Table E.1.

High Priority for Implementation - The alternatives with a high priority for implementation are Alternatives 1, and 2. These are ranked high because they benefit wetland hydrology in the Preserve, they provide improved flood protection for the Tarpon Woods area, and permitting and land acquisition are not considered to be major issues. The cost of implementation of these alternatives is less than the cost of property acquisition. Costs are \$104, 440 for Alternative 1, and \$176,080 for Alternative 2. The County owns the land where Alternatives 1 and 2 are located.

Medium Priority for Implementation - The alternatives with a medium priority for implementation are Alternatives 3, 7, 9, 10, and 11. These are ranked medium because the conceptual design needs refinement (3), the BMPs would not improve wetland hydrology in the Preserve (7, 10, 11), or the BMP would not lower peak stages in Tarpon Woods (9). The cost of implementing these alternatives ranges from \$500,000 for Alternative 9 to \$10,000,000 for Alternative 10.

Low priority for implementation – The alternatives with a low priority for implementation are Alternatives 4, 5, 6, and 8. These are ranked low because of high cost (4, 5 and 6), lack of effectiveness (6), or high environmental impacts, land acquisition, and permitting difficulties (8). Alternative 8 would reduce stages and duration of flooding in Tarpon Woods more than any other alternative, but it would not benefit hydrology in the Preserve. The cost of implementing these alternatives ranges from \$7,096,560 for Alternative 8 to \$67,419,170 for Alternative 4.

Priority for combined alternatives - In response to a request from the Pinellas County Public Works Department, two combined alternatives were evaluated to improve the flood protection benefits of Alternative 2. C1 combines Alternatives 2 and 7, and is given a medium priority for implementation because the permitting and land acquisition difficulty is medium for Alternative 7. C2 combines Alternatives 2 and 8, and is given a low priority because of environmental impacts, and the permitting and land acquisition difficulty is high for Alternative 8.

Future design activities could include:

- Updating the model by incorporating the topographic information collected by Florida Department of Environmental Management, field data collected by the District, and additional surveys;
- Design of alternative weir controls to allow the County to manage water levels in the Preserve during low flows;
- Detailed evaluation of the impact of filling ditches in the Preserve;
- Model simulations using long term historical rainfall data to test these more detailed alternatives; and
- Evaluation and design of outlet systems for developments in Tarpon Woods in order to take advantage of the improvements in the main channel.

An assessment of all available drainage easements and available right-of-way (R/W) throughout the watershed should be performed. An initial assessment shows that the main drainage conveyances are currently not protected with easements or R/W. Also, maintenance of existing systems is hampered by a lack of accessibility.

Table E.1 Final Alternative BMP Evaluation and Cost Matrix

			Preserve			Tarpon Woods					
Alt.	Description	Cost	Historic Flow Paths Restored	Flood stages recede slower @ day 4 (Value)	Increases Flood Stages (Value) [See Note 1]	Reduces Flood Stages (Value) [See Note 1]	Flood stages recede faster @ day 4 (Value)	Impacts & Permitting Difficulty	Land Acquisition Difficulty	Implementation Priority	Comments
1	Add culverts and construct upstream weir structures at Lora Lane. Fill the ditch west of Lora Lane	\$104,440	No	Yes (3' higher)	Yes (0.1' - 0.2')	Yes (0.1' - 0.3')	Yes (1.1' lower)	Low	Low	High	This alternative would improve Preserve hydrology, and it reduces flooding problems (mainly duration) in Tarpon Woods at a relatively low cost.
2	Implement Alternative 1 and add culverts and weir structures at two power line road crossings. Fill the road ditches along the diagonal power-line road	\$176,080	Yes	Yes (3' higher)	Yes (0.1' - 0.2')	Yes (0.1' - 0.3')	Yes (1.2' lower)	Low	Low	High	This alternative includes the benefits of Alternative 1, and would restore the Channel L historic flow path.
3	Implement Alternative 2 and raise the elevation of 16,000' of Lora Lane and the diagonal power line road by three feet.	\$6,332,800	No	Yes (3.4' higher)	Yes (0.4' - 1.1')	Yes (0.1' - 0.2')	No	Medium	Low	Medium	The conceptual design needs to be refined to address flood waters spilling south into Double Branch Watershed, and to restore historic flow paths for Channel L and G. It has potential for environmental and flood protection benefits.
7	Gravity flow diversion at East Lake Rd. to Lake Tarpon	\$5,329,270	No	No	No	Yes (0.4' - 0.5')	Yes (3.8' lower)	Medium	Medium	Medium	This alternative would improve flood protection, but not Preserve hydrology. Land acquisition and permitting difficulty make this a medium priority
9	Low water crossings at the north – south power line road along the east boundary of the Preserve	\$500,000	Yes	No	No	No	No	Low	Low	Medium	This alternative would restore historic flow paths into the Preserve, but would not improve flood protection in Tarpon Woods.
10	Acquisition of Flood Affected Properties	\$10,000,000	No	No	No	No	No	Low	High	Medium	This alternative could be implemented instead of the BMPs designed to improve flood protection.
11	Channel Maintenance – Ridgemoor Blvd. to Tarpon Woods Blvd.	\$500,000	No	No	No	Yes (*)	Yes (*)	Low	High	Medium	*Alternative 11 is not considered effective for reducing stages in Tarpon Woods for the 5-, 25- and 100-year events, but it could reduce stages during the more frequent rain events.
C1	Combine Alternatives 2 and 7	\$5,505,350	Yes	Yes (3' higher)	Yes (0.1' - 0.2')	Yes (0.5' - 1.2')	Yes (3.8' lower)	Medium	Medium	Medium	This alternative includes the benefits of 2 and 7, but land acquisition and permitting difficulty associated with Alternative 7 make this a medium priority.
4	Diversion channel adjacent to Lora Lane and diagonal power line road to outfall to Lake Tarpon Canal (8.6 miles)	\$67,419,170	No	Yes (1.6' higher)	Yes (0 - 1.2')	Yes (0.2' - 0.3')	Yes (1.5' lower)	High	High	Low	The high cost of this alternative, and the environmental impacts and permitting difficulty make this a low priority for implementation.
5	Pump diversion for Brooker Creek at Ridgemoor Blvd. to Lake Tarpon	\$15,865,690	No	No	No	Yes (0.1')	Yes (0.4' lower)	Medium	Medium	Low	The high cost, relatively low flood protection benefit, and no benefit to the Preserve make this alternative a low priority.
6	Pump diversion from Brooker Creek / expand existing borrow pit north of Keystone Rd.	\$30,925,950	No	No	No	No	Yes (1.3')	Medium	Low	Low	This alternative is a low priority because it doesn't benefit the Preserve, the flood protection benefit is low, and the cost exceeds Alternative 10.
8	Brooker Creek high flow channel between Ridgemoor Blvd. & Tarpon Woods Blvd.	\$7,096,560	No	No	No	Yes (0.4 - 2.5')	Yes (3.3' lower)	High	High	Low	This Alternative would reduce flooding more than any other, but it would not benefit the Preserve. Permitting and land acquisition would be difficult so it is a low priority.
C2	Combine Alternatives 2 and 8	\$7,272,640	Yes	Yes (3' higher)	Yes (0.1' - 0.3')	Yes (0.4' - 2.5')	Yes (3.9' lower)	High	High	Low	This alternative includes the benefits of 2 and 8, but it is ranked low because of the impacts, permitting and land acquisition issues for Alternative 8.

Note 1: The range of values for the 5-, 25-, and 100- year events is shown at Node 494380 in the Preserve and 497090 in the Tarpon Woods area.

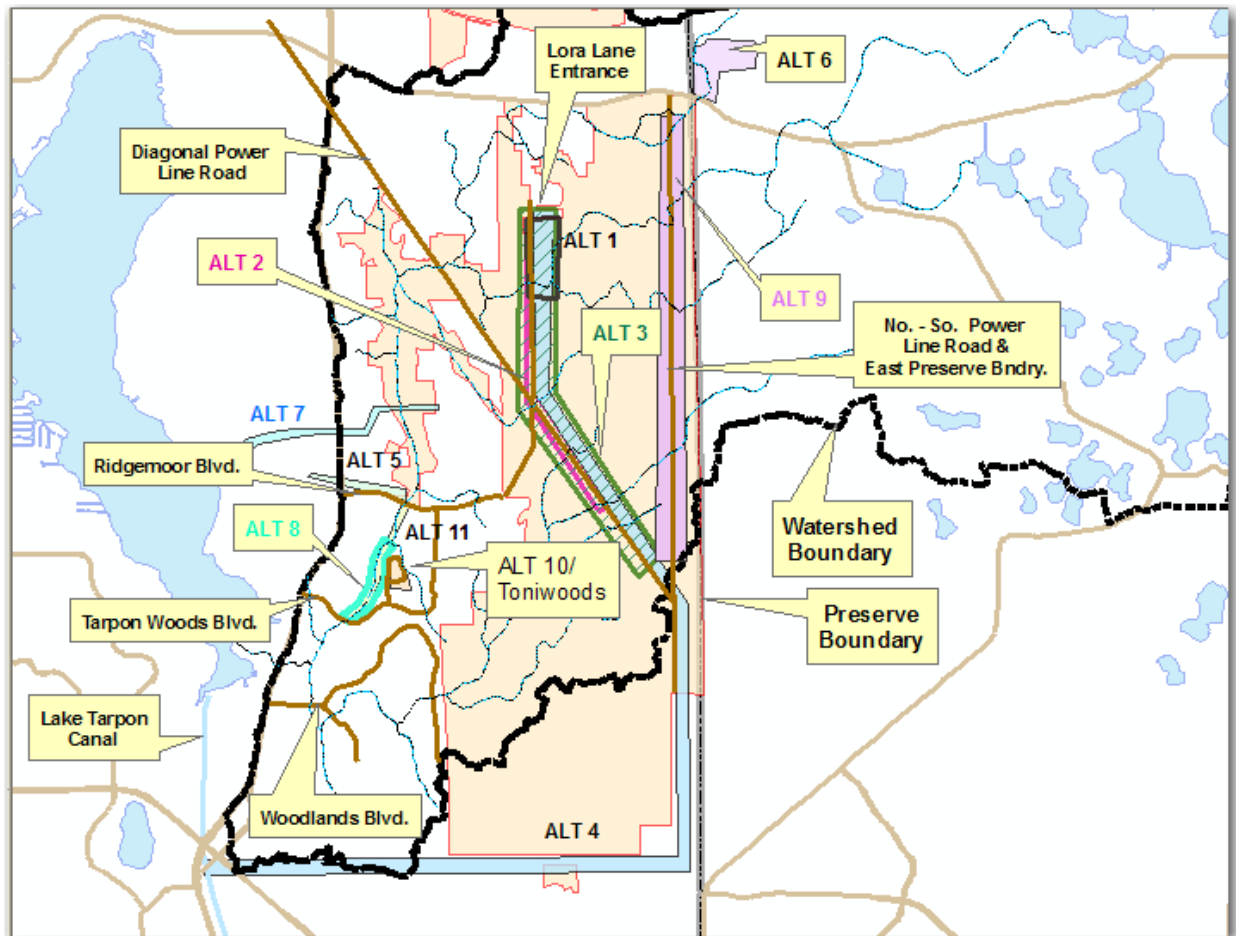


Figure 1.0a: BMP Alternatives 1-11

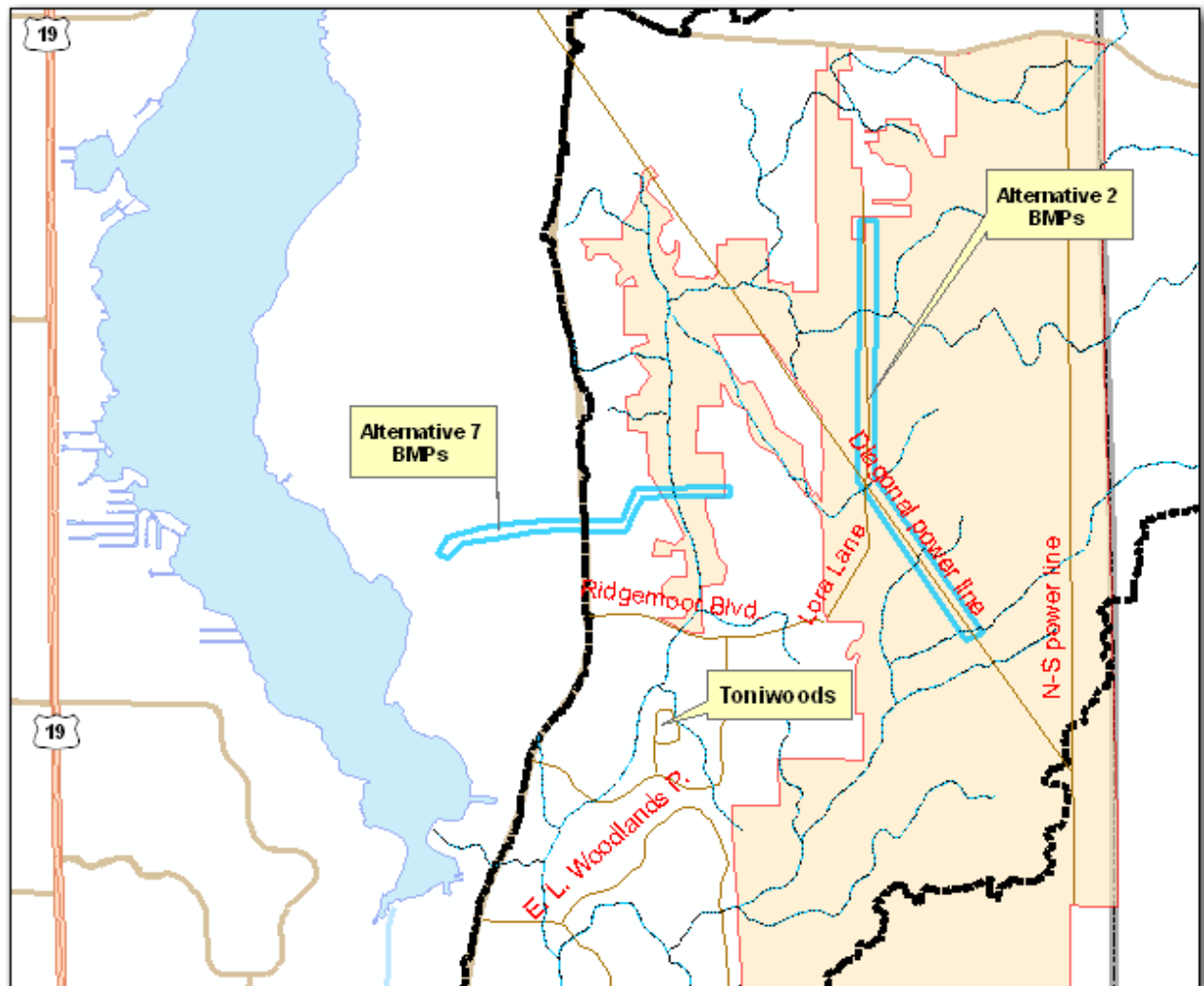


Figure 1.0b: BMP Alternative C1

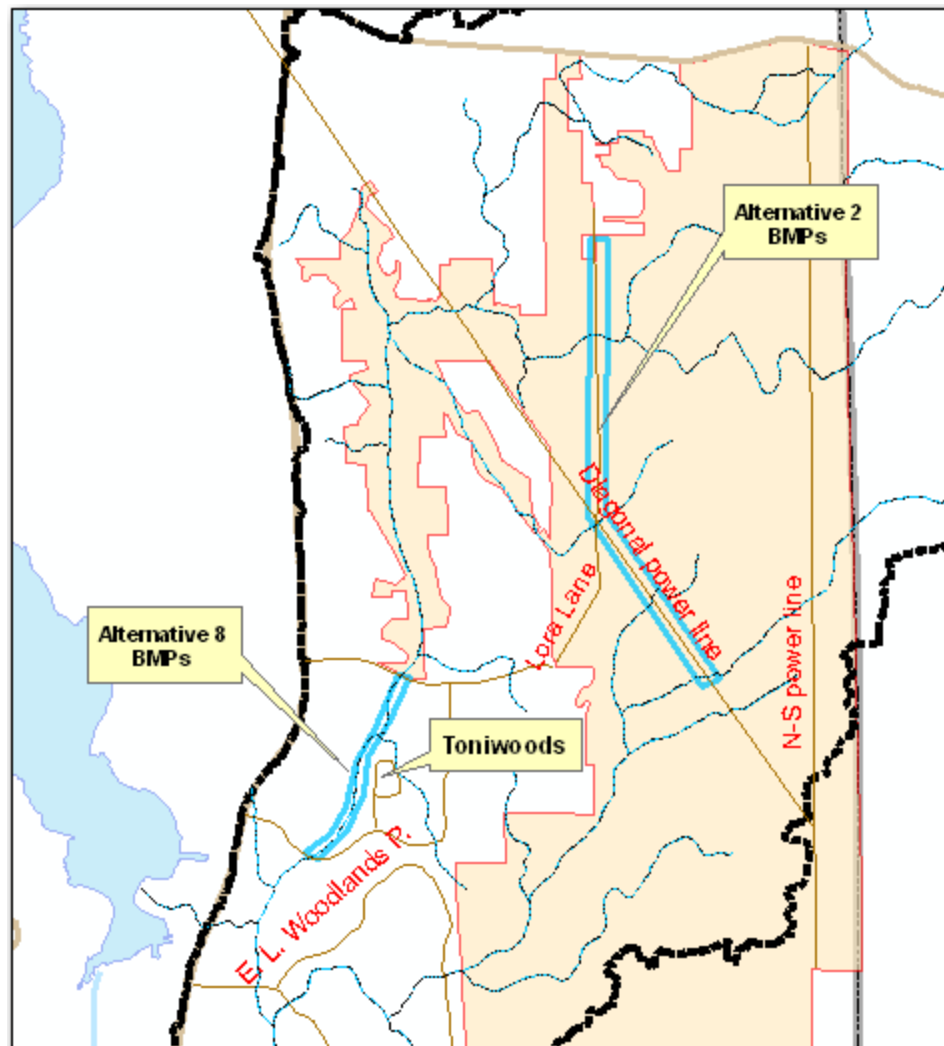


Figure 1.0c: BMP Alternative C2

BROOKER CREEK WATERSHED ALTERNATIVE BMP ANALYSIS

1.0 INTRODUCTION

This report presents the results of a Best Management Practices (BMPs) alternative analysis for the Brooker Creek Watershed. The Southwest Florida Water Management District (District) and Pinellas County have a multi-year funded project to perform three elements of the District's Watershed Management Program (WMP) for the Brooker Creek Watershed: 1) Topographic Information, 2) Watershed Evaluation, and 3) Watershed Management Plan. The Topographic Information element provides the foundational information used to define the watershed's boundaries, storage and conveyance. The Watershed Evaluation element tasks include field evaluation of the watershed and its intermediate conveyance system, inventory of water resources and stormwater management infrastructure, data development and GIS processing of watershed parameters, and an immediate maintenance evaluation. The Watershed Management Plan tasks include survey, data management and development of watershed parameters, GIS processing, computer modeling, floodplain analysis, surface water resource assessment (water quality), establishment of level of service (LOS), and a best management practices (BMPs) alternative analysis, which includes prioritized recommendations and probable costs. The Watershed Management Plan provides a management tool to define the effects of potential restoration projects and BMPs within the varied mosaic of developed areas and publicly owned lands (uplands and wetlands) in the Brooker Creek Watershed.

This BMP alternative analysis is the final task to complete of the three elements of the Watershed Management Program. The watershed boundaries, storage, conveyance, flow paths and parameters have been developed and verified by field reconnaissance. The information has been used to create a computer model of the existing watershed conditions. This model was used to evaluate the BMPs considered herein. Refer to the following reports for more information about the prior work:

- Lake Tarpon SWIM Plan, July 2001, Southwest Florida Water Management District
- Brooker Creek Watershed Feature Data Review and Evaluation, July 2005, URS Corporation Southern
- Baseline Monitoring Report for the Brooker Creek Preserve, Pinellas County, Florida, September 2006, URS Corporation Southern
- Brooker Creek Watershed Evaluation, September 26, 2006, URS Corporation Southern
- Brooker Creek Preserve, Pinellas County, Florida Environmental Report, June 2006.
- Brooker Creek Floodplain Analysis, August 14, 2009, URS Corporation Southern

In addition to these reports, reference is made to a Storm Water Management Plan for the Hillsborough County part of the watershed prepared by Advance Engineering in 2001. This study was updated by Post, Buckley, Schuh and Jernigan, Inc. (PBS&J) in 2006. The PBS&J study included Stormwater Management Model (SWMM) updates of Hillsborough County. For the BMP analysis, URS has developed a model of the entire watershed by combining the Hillsborough County model as-is with a URS model created for Pinellas County.

1.1 Authorization

URS Corporation Southern (URS) has been contracted by the Southwest Florida Water Management District (District) to complete elements of a Watershed Management Program for the Brooker Creek Watershed. The District is managing this project by issuing work orders under the terms of Agreement No. 04CONC00006. The Pinellas County Department of Environmental Management (PCDEM) is managing the County's part, with assistance from Pinellas County Public Works (PCPW).

1.2 Project Location and General Description

The Brooker Creek Watershed extends across southern Pasco, northeastern Pinellas County and northwestern Hillsborough County, just south of the Pasco County line. The watershed is approximately bordered on the west by East Lake Road, on the north by Tarpon Springs Road and Gunn Highway, on the east by the Veteran's Expressway and Gunn Highway, and on the south by Racetrack Road, as indicated in Figures 1.1 and 1.2.

The watershed characteristics are given in the Watershed Evaluation report referenced above. The combined area of the watershed is 29,143 acres, with 10,737 acres in Pinellas County, and 18,412 acres in Hillsborough County. The three primary land use categories are wetlands, urban and built up areas, and agriculture. The largest block of wetlands is the Preserve. More than 80% of the soils in the watershed are poorly drained with high runoff potential. The ground surface elevation ranges from 70 feet NGVD in Hillsborough County near the Veteran's Expressway (at the head waters of the watershed), down to 3 feet NGVD at the outlet at Lake Tarpon. The land surface elevation decreases dramatically near the Pinellas-Hillsborough County line, and the physical character of the area changes from lake dominated landscape in Hillsborough County to an upland forest and wetland dominated landscape in Pinellas County. The landscape in Hillsborough County is gently rolling to level with numerous lakes and smaller surface water bodies that are surrounded by residential development and small commercial areas. The portion of the watershed in Pinellas County is flat and wooded, with large areas of wetlands in the eastern one-half and large residential and commercial development in the western half.

In Pinellas County, Brooker Creek flows southwest approximately 15 miles from northwest Hillsborough County to the outfall at Lake Tarpon. The main channel of Brooker Creek crosses Tarpon Springs Road approximately one mile east of the County line. Refer to Figure 1.3 for the location of the main channel (Channel A) and historic flow paths. Once the creek enters the Preserve boundary, the creek is crossed by a Progress Energy power line corridor, where the creek sheet flow characteristics and floodplain vegetation have been disrupted. After leaving the power line corridor the creek forms a broad natural channel where the floodplain is relatively undisturbed, until it crosses several man-made features located on the west side of the Preserve. These features include an access road, Lora Lane, which acts as an impoundment, a large ditch that flows off the Preserve to the west, and another power line corridor which bisects the Preserve diagonally from northwest to southeast. A ditch alongside a water transmission pipeline that follows and extends along Lora Lane is also a feature of concern. These features have influenced the hydrology in the Preserve.

Wetlands within the Preserve are generally of high quality and are comprised of nine wetland habitat types. However, the historical hydrology in many of these wetlands has been altered due to anthropogenic activities within the Preserve and surrounding areas, which include the construction of utility corridors and access roads, adjacent development, and man-made ditches and ponds associated with the utility infrastructure and roadways. Drainage patterns and historic hydroperiods of the wetlands have been impacted. These hydroperiod modifications have resulted in a general shift of more transitional species into deeper zones within many of the wetlands.

The highest severity of flooding within Brooker Creek Watershed in Pinellas County is concentrated around the Tarpon Woods area, which is located at the end of the watershed, where Brooker Creek discharges into Lake Tarpon. A U.S. Geological Survey report entitled Lower Brooker Creek Flood Profile (LBCF) [USGS WRI 77-115, 1978] describes the Tarpon Woods Development area as "... broad and flat, containing numerous depressions, swamps, and low-lying areas. The flood plain swamps and depressions are interconnected, contributing to floodwater detention and slow flood recession." The primary purpose of the LBCF study was to provide improved flood plain information to be used by local government to control flood plain encroachment and development to minimize possible future flood losses. With the dynamics of the creek and the flat terrain, the Tarpon Woods area is very flood affected. Flooding is a result of encroachment into the historic flood plain of Brooker Creek, along with runoff increases from land alterations that occurred prior to regulatory control. The Tarpon Woods development drainage plans from 1973 (prior to the District surface water permitting program) show that the streets and low lying areas were designed to be inundated during low frequency rainfall events (e.g., the 25-year storm event). Even though the streets were designed to flood, the duration of flooding is a concern of the residents because it hinders local traffic and potentially emergency vehicles.

1.3 Purpose and Objectives

The purpose of this analysis is to provide the Pinellas County Department of Environmental Management (PCDEM) and the Pinellas County Public Works Department (PCPW) with a list of BMPs that could be implemented to improve the hydrology in the Preserve and to increase flood protection in Tarpon Woods. BMPs are traditionally described in terms of water pollution prevention, reduction, and elimination. Novotny (2003) defined BMPs as "...methods, measures, or practices selected and implemented to meet the needs of nonpoint (diffuse) source control, BMPs include, but are not limited to, structural and nonstructural controls and operations and maintenance procedures. BMPs can be applied before, during, and after pollution producing activities to reduce or eliminate the introduction of pollutants from diffuse sources into receiving waters." This report expands the traditional definition to include not only water quality measures, but also flood protection and flood control measures. Implementation projects that improve natural systems and water quality are likely to be eligible for cooperative or Surface Water Improvement and Management (SWIM) District funding. Implementing BMPs to improve flood protection in regional or intermediate systems may also be eligible for cooperative funding from the District. The BMPs recommended herein may qualify for District funding.

The first objective of the BMP analysis was to evaluate BMPs that would restore wetland hydrology by increasing water levels during low flow periods within wetlands that have been degraded due to flow alterations within the Preserve. The ultimate discharge point for the watershed is Lake Tarpon, the seventh ranked water body on the District's list of SWIM priority water bodies. Restoring the hydrology and habitat of surrounding wetlands is one of the SWIM strategies to address the decline in water quality in Lake Tarpon. BMPs that were identified in the Lake Tarpon SWIM Plan, July 2001 were evaluated in this project.

A second objective of the BMP analysis was to evaluate BMPs that could provide improved flood protection in the residential developments in the vicinity of Tarpon Woods Boulevard. Street and yard flooding has been an issue in the Toniwoods portion of the Tarpon Woods developments for many years. A list of conceptual BMPs that could reduce the duration and depth of flooding in Brooker Creek main channel in the Tarpons Woods area was developed. Implementing these BMPs would provide an outlet for localized drainage improvements to the collection systems in Toniwoods. Improvements to the local collections systems are not included in this BMP analysis.

Section 2.0 contains information about the conceptual BMPs considered, the screening process, and the list of the BMPs selected for detailed analysis. Section 3.0 contains the criteria for evaluation and the analysis of each of the selected BMPs. Section 4.0 contains a summary of findings and a discussion of easements and funding sources. Section 5.0 presents a discussion of permitting issues to consider.

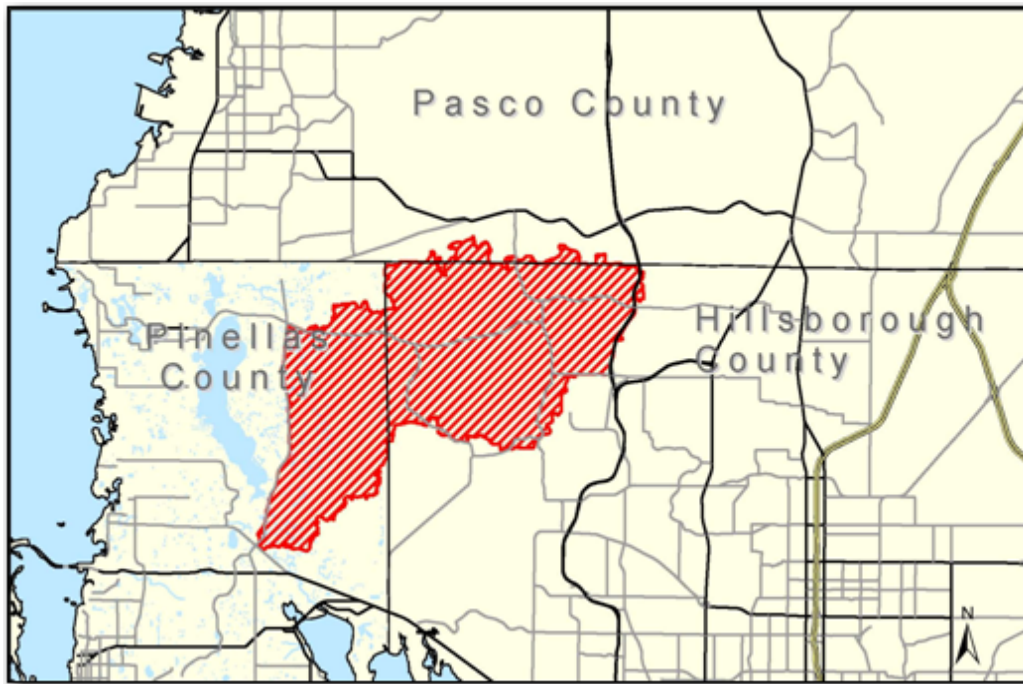


Figure 1.1: Location Map

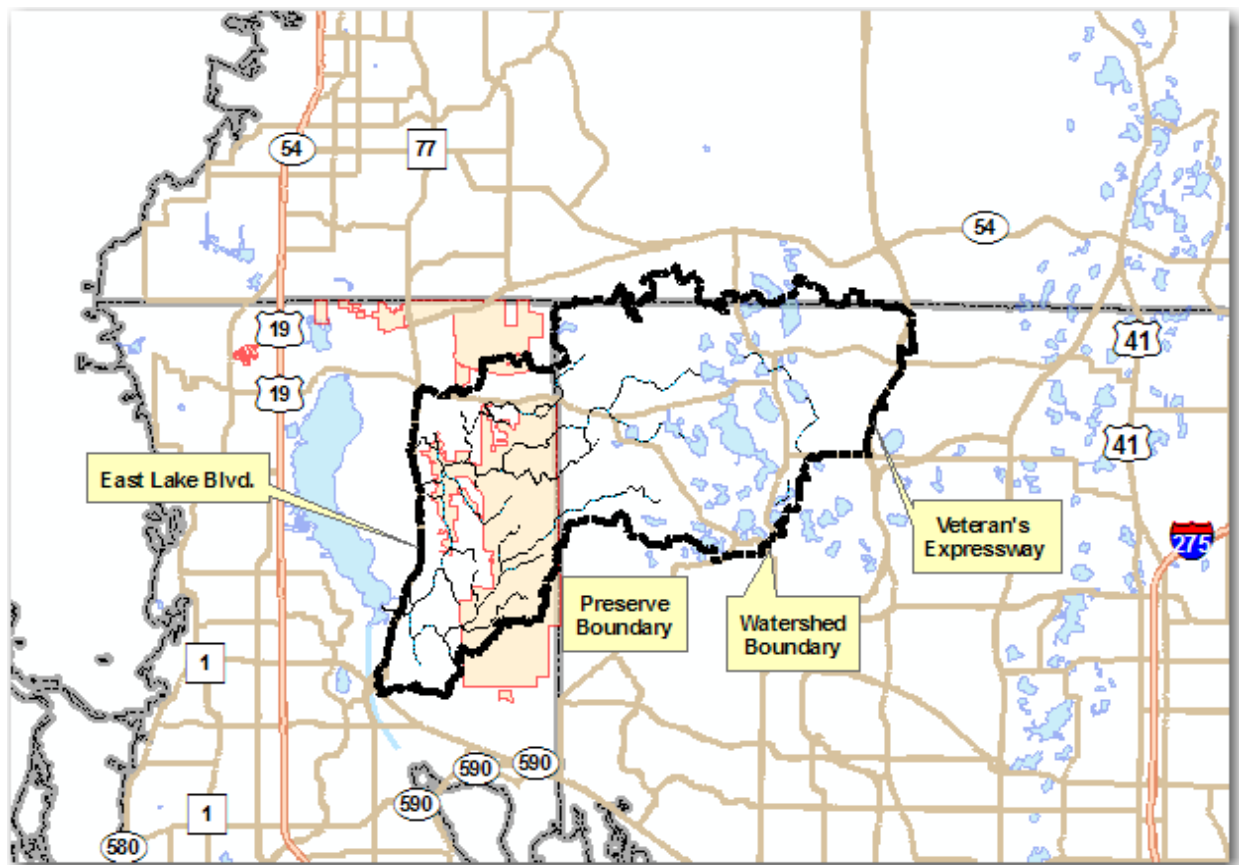


Figure 1.2: Boundary Map

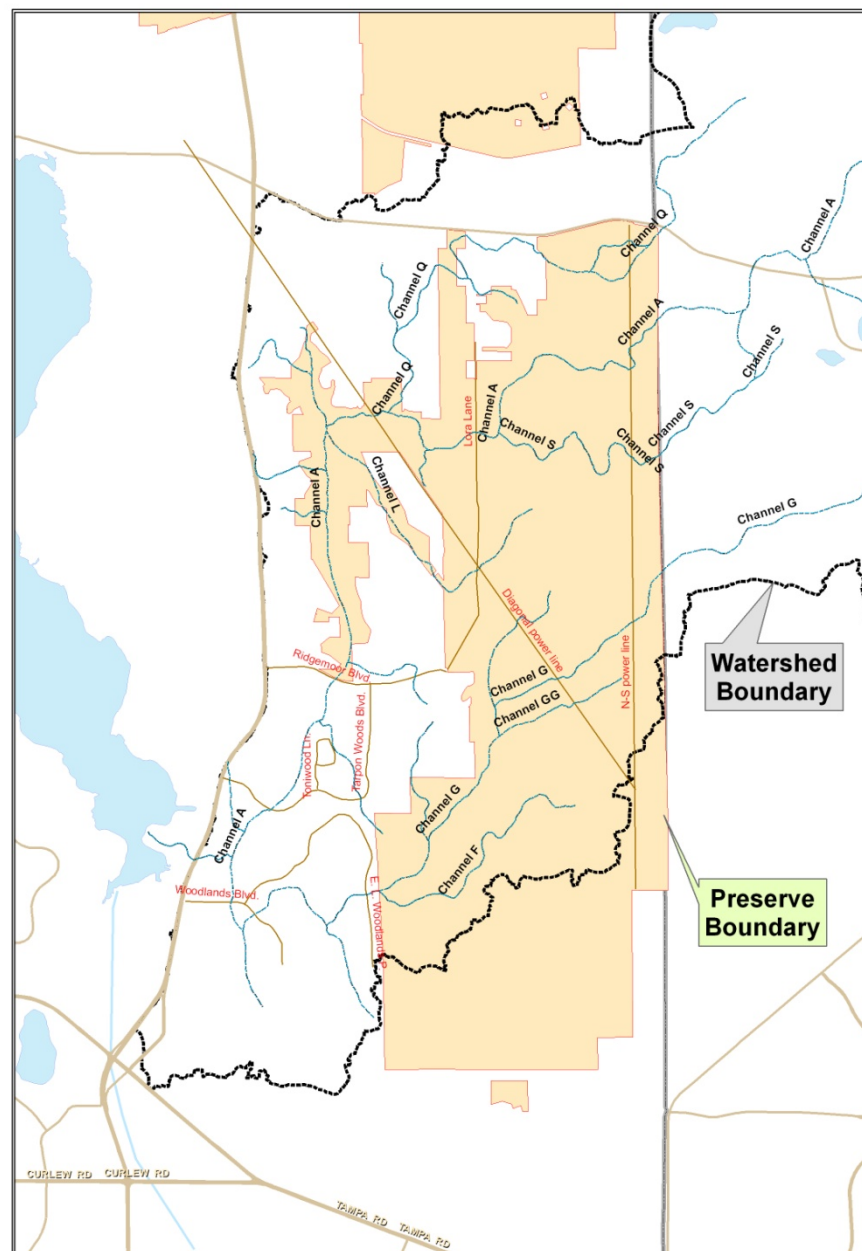


Figure 1.3: Brooker Creek Main Channel and Historical Flow Paths

2.0 ALTERNATIVE BMP FORMULATION

2.1 Alternative BMP Concepts

The types of BMPs considered in this analysis included Environmental Improvements (EI), Flood Control (FC), and Water Quality (WQ). The following list, while not exhaustive, shows the variety of available BMPs considered in this analysis.

- Weir controls (Structural EI, Structural FC, Structural WQ)
- Fill existing ditches (Structural EI)
- Add structures (Structural FC)
- Raise structures (Structural FC)
- Purchase flood affected areas (Non-Structural FC)
- Improve capacity of channels (Structural FC)
- Pump diversions (Structural FC).

While this report focuses on structural BMPs, other alternative BMP concepts were also considered. Once the BMPs were identified, the best were then selected for more detailed analysis.

2.2 Hydrology Restoration Alternatives

The BMPs that were considered herein could restore wetland hydrology by increasing water levels during low water level periods within wetlands that have been degraded due to flow alterations within the Preserve. These BMPs are substantially taken from the list of priority projects identified in the Lake Tarpon Surface Water Improvement and Management (SWIM) Plan, July 2001. A brief description of each BMP considered is tabulated below in Table 2.2. Not all the BMPs considered were selected as one of the preferred alternatives for detailed analysis. The ones that were selected are identified in Table 2.2. Refer to Section 2.4 for a discussion of the selection of preferred BMPs.

Table 2.2 Hydrologic Restoration Alternatives Considered

Alt.	Description	Preferred Alt.
A	Restore the flow path that had been cut off by the removal of soil which created very extensive borrow pits. Focus on the borrow pit north of Keystone Road near the Pinellas and Hillsborough county line.	No
B	Restore historical flow across the Progressive Energy power line corridor on the east boundary of the Preserve either by adding culverts or grading and roadway stabilization, and filling or adding blocks to the ditches along the corridor.	Yes - #9
C	Restore flow across old built up driveway located between Cypress Trail Drive and the Preserve boundary using culverts or grading.	Yes - #1, 2 & 3
D	Fill ditches on either side of entrance at Lora Lane. Compensate with culverts so the driveway can be used during a flood event.	Yes - #2 & 3
E	Fill both ditches along the nature trail and add culverts or boardwalks as needed.	No
F	Fill ditches on the west side of Lora Lane within the Preserve. Also consider filling or adding blocks to the ditch south of the channel A crossing. Filling ditch north of channel A may cause flooding of houses upstream of this ditch.	Yes - #2 & 3
G	Fill the perimeter ditch around an old nursery located east of the diagonal power line road, and Coventry Village at Ridgemoor.	No
H	Fill ditches, add culverts at historical flow path crossings and re-grade the diagonal power line road.	Yes - #2 & 3
I	Restore the Channel L flow path by adding culverts and/or re-grading and stabilizing the diagonal power line road from Lora Lane entrance to the south.	Yes - #2
J	Fill the ditches near the Preserve boundary, and south of Woodridge Lakes subdivision.	No

2.3 Flood Protection Alternatives

The BMPs considered for improved flood protection were based on the input from many sources. Meetings were held among PCDEM, PCPW, Tarpon Woods Action Committee (TWAC), Hillsborough County and District Engineering and Operations staff and URS. PCPW hired Tampa Bay Engineering Group, Inc. (TBE) to perform a feasibility study to investigate possible solutions to flooding encountered within the Tarpon Woods area. These BMPs included constructing a flood protection area, and different configurations of improved conveyance between Ridgemoor Boulevard and Tarpon Woods Boulevard. The results of the feasibility study were presented at a public meeting held on September 27, 2007. URS and TBE shared information and worked together in selecting BMPs for consideration. The list of flood protection BMPs considered is tabulated below.

Table 2.3 Flood Protection Alternatives Considered

Alt.	Description	Preferred Alt.
	General	
L	Modify the lake operation scheme for Lake Tarpon	No
M	Modify the gate operation plan for Island Ford, Keystone and Lake Crescent Lakes	No
	PCPW Alternatives	
N	Floodplain storage pond in the vicinity of Tarpon Woods	No
O	3,350' long, 60' wide high flow channel	No
P	3,450' of double 6' X 12' concrete box culvert	No
Q	1,800' long, 120' wide high flow channel	No
R	1,840' of triple 6' X 12' concrete box culvert	No
S	3,400' long , 50' wide expanded Brooker Creek main channel	Yes - # 8
T	3,700' long, 24' wide concrete paved high flow channel	No
	Other Alternatives	
U	Diversion channel adjacent to Lora Lane and diagonal power line road to outfall to Lake Tarpon Canal (8.6 miles)	Yes - # 4
V	Pump diversion at Ridgemoor Blvd. from Brooker Creek to Lake Tarpon	Yes - # 5
W	Pump diversion from Brooker Creek to an expanded existing borrow pit north of Keystone Rd.	Yes - # 6
X	Gravity flow diversion at Ridgemoor Blvd. from Brooker Creek to Lake Tarpon	Yes - # 7
Y	Property acquisition in flood-prone areas	Yes - # 10
Z	Channel maintenance	Yes - # 11

2.4 Selection of Conceptual BMPs

Not all of the 25 conceptual BMPs considered were selected for detailed analysis. The results of the TBE feasibility study, public comments, and input from all parties were used to screen the BMPs considered to arrive at the list of BMPs for analysis. A discussion of why some BMPs were not selected for further analysis is given in the following paragraphs. The analysis of the preferred alternatives is provided in Section 3.0.

Alternatives A-J – Alternative A was completed as a separate project. Filling ditches is included as all or part of alternatives B-H and K. Alternatives E, G and part of H and J were not modeled and are not among the list of preferred alternatives described in Section 3.0 for two reasons. First, the change in storage caused by filling or adding ditch blocks is generally not enough to significantly affect the model storage during event based analyses. In general these ditch projects can be implemented without causing offsite impacts. The second reason the ditches were not part of the detailed analysis is the topographic data that was available was found to have errors and lacked the level of detail needed to evaluate the ditches. New topographic information was recently collected by the Florida Department of Environmental Management

that can be used in the future design phase. Alternatives that include restoration of historical flow paths, B and I, are included in the detailed analysis.

Alternative L – Lake Tarpon Management - Flood protection in the Tarpon Woods area has been the subject of many different studies dating back to the mid-1980s. An issue that repeatedly comes up is the possible flood impacts caused by managing water levels in Lake Tarpon and three lakes in Hillsborough County - Island Ford, Crescent, and Keystone. No discussion of BMPs would be complete without addressing this.

There has been a perception in the past that water levels in Lake Tarpon create backwater and affect flooding in the Tarpon Woods area. This perception is unfounded. District Operations staff have controlled water levels in Lake Tarpon since 1972. A structure (S-551) is located at the outlet that controls the lake level and discharges water into the Lake Tarpon Canal. The ability of S-551 to pass the 30-year frequency storm event with the lake at elevation 3.6, and to pass 125 percent of the 100-year frequency storm event (i.e., standard project flood) with a lake stage of 5.7, has dramatically reduced the flood potential for properties surrounding Lake Tarpon. Since 1999, S-551 has been monitored 24 hours a day and since 2004-2005 the gate has been remotely controlled using the District's Supervisory Control and Data Acquisition (SCADA) system. The SCADA system monitors the water levels on the lake in real time and allows for the remote control of the structure's flood gates, dramatically increasing the District's ability to respond to a flood event.

Alternative M - Management of Hillsborough County Lakes- There is also a perception that the operation of gates in Hillsborough County may be exacerbating flooding in Tarpon Woods. The thought is by changing the gate operation or other fixes, it may reduce flooding. This is also not correct. Many of the lakes in Hillsborough County do not have control structures on the lake outfalls and cannot utilize structures due to development and lack of a positive outfall. The upstream lakes with or without operable structures are often full and discharging during the wet season and flood events. The gates on lakes with operable structures are fully open; keeping gates closed at this time would flood residents around the lakes. These structures are for water conservation so the lakes will not be drained during the dry season. The District creates storage volume for summer storm events by lowering the lake levels by 6" at the beginning of the hurricane season. During a flood event the level in the lakes is a function of the dynamics of the watershed's storage and conveyance characteristics. The District uses information from continuous monitoring of water levels and from numerous sources of weather forecasting to manage Island Ford, Keystone and Crescent Lakes. Since 2004-2005 the gates have been remotely controlled using the District's SCADA system. As mentioned above, the SCADA system monitors the water levels on the lake in real time and allows for the remote control of the structure's flood gates, dramatically increasing the District's ability to respond to a flood event.

Hillsborough County and the District have funded a study to analyze the operation of the gates on the three lakes in Hillsborough County. This study is scheduled to begin before the end of 2010.

Alternatives N to T - PCPW's consultant TBE presented these seven alternatives at the public meeting in September 2007. Alternative N, flood storage, was deemed not feasible by the TBE

consultant. The other six consisted of increasing the capacity of the Brooker Creek main channel between Ridgemoor Boulevard and Tarpon Woods Boulevard by construction of a large box culvert or by excavating a wide channel. TBE explained that the effectiveness of these six schemes is limited because of the large watershed area upstream and the flat topography in this area.

The public reaction was mixed due to costs, potential land acquisition issues, and concerns over the impacts to the golf course built around Brooker Creek in the Tarpon Woods development area. Maintenance of Brooker Creek was an important issue with the public. The lack of easements has hampered County efforts to perform maintenance.

After the public meeting TBE was directed by PCPW to design improvements to the local collection system in Toniwoods. These local system improvements will be most effective if the peak elevations and duration of flooding in the Brooker Creek main channel can be reduced. One of the alternatives presented by TBE, construction of a large capacity channel located within the existing creek, was selected for detailed analysis (Alternative S) in this project.

Alternatives U to Z – These alternatives were chosen for consideration during meetings among URS, PCDEM, PCPW, and the District.

2.5 General Description of Preferred Alternatives

Thirteen preferred alternatives selected for detailed analysis are listed in Table 2.5. The list includes weir construction for water level and flow control, additional culvert construction, conveyance improvements, pumping stations, or channel construction.

Constructing weirs upstream of existing and new culvert crossings (Alternatives 1-3, and C1 and C2) would allow the County to better manage water levels in the Preserve. Currently, the control elevation for water levels in the Preserve is at the invert of the culverts at the crossings. The weirs evaluated herein have a crest elevation above the culvert inverts. This analysis provides the County with the upper limit of upstream and downstream effects of adding weirs. When a more detailed design is undertaken in the future, the weirs will include bleeder orifices or other fixtures as needed to facilitate the management of water levels. The addition of culverts where weirs are proposed would maintain the capacity of the crossing during major storm events.

Four alternatives (4-8) were designed to improve flood protection by conveyance improvements, pumping stations or channel improvements, and two, C1 and C2, are combinations of other BMPs - 2 and 7, and 2 and 8, respectively. Alternatives 4 - 7 consist of diverting flood flows from Brooker Creek before reaching Tarpon Woods. Alternative 8 consists of increasing the capacity of the Brooker Creek channel through the golf course between Ridgemoor Boulevard and Tarpon Woods Boulevard. Alternative 9 is re-grading the north to south power line road on the east side of the Preserve at selected locations and filling in a ditch on the east side of the power line road to restore the historic flow paths. Alternative C-1 combines the elements of Alternatives 2 and 7. C-2 is a combination of Alternatives 2 and 8.

Alternative 10 is acquisition of flood-prone properties, and 11 is channel maintenance of the creek in the vicinity of Tarpon Woods. One of the BMPs (Alternative 6) is located in Hillsborough County; the rest are in Pinellas County.

A detailed description of each along with an analysis is given in the next section. Ten of the selected alternatives (1-8, C1 and C2) required hydraulic modeling to estimate the proposed benefits.

Table 2.5 List of Preferred Alternatives

Alt.	Description of Alternative
1	Add culverts and construct upstream weir structures at Lora Lane. Fill the ditch west of Lora Lane.
2	Implement Alternative 1 and add culverts and weir structures at two power line road crossings. Fill the road ditches along the diagonal power line road.
3	Implement Alternative 2 and raise the elevation of approximately 16,000' of Lora Lane and the diagonal power line road by three feet.
4	Diversion channel adjacent to Lora Lane and diagonal power line road to outfall to Lake Tarpon Canal (8.6 miles)
5	Pump diversion at Ridgemoor Blvd. from Brooker Creek to Lake Tarpon
6	Pump diversion from Brooker Creek to and expanded existing borrow pit north of Keystone Rd.
7	Gravity flow diversion at East Lake Rd. to Lake Tarpon
8	Brooker Creek high flow channel between Ridgemoor Blvd. & Tarpon Woods Blvd.
9	Low water crossings at the north-south power line road along the east boundary of the Preserve
10	Property Acquisition in Flood-Affected Areas
11	Channel Maintenance
C1	Combine Alternatives 2 and 7
C2	Combine Alternatives 2 and 8

3.0 PREFERRED BMP ALTERNATIVES

3.1 Evaluation Criteria

The preferred BMPs were evaluated based on cost, environmental benefits / impacts, permitting issues, and flood protection benefits. Probable construction costs were estimated for all of the BMPs and were compared to the cost of purchasing 22 flood-prone properties in Tarpon Woods. The cost of implementing a BMP is considered positive if the cost is less than the property acquisition costs.

BMPs were considered to have an environmental benefit if historic flow paths are restored, the duration of flooding is extended, and/or peak stages are higher than existing conditions. Longer duration and higher stages are indications that there is potential for managing water levels in wetlands during low flow periods. Environmental impacts were assessed qualitatively as low, medium, or high depending on the extent of the damage to natural systems, and if the damage would be permanent or temporary. Excluding minor impacts during construction, any impacts would be unacceptable. It is very unlikely that a construction permit could be obtained for the alternatives with significant environmental impacts.

The flood protection benefit was estimated as the reduction in peak flood levels and duration of flooding in the main Brooker Creek channel during passage of the 5-, 25- and 100-year flood events. The stormwater management system internal to Tarpon Woods was included in the development of the existing conditions model, but an improvement to the local drainage system was not included in the evaluation. A lower peak flood elevation or shorter flooding duration in the primary Brooker Creek channel system would benefit the development only to the extent that stormwater could be discharged from the development into Brooker Creek. PCPW is currently upgrading some of the internal drainage systems within developments that have experienced previous flooding.

Permitting difficulty is designated as low, medium or high level of effort needed. A BMP that is difficult to permit is given a low priority for implementation. The difficulty in obtaining easements or land purchase was considered in assigning priority for implementation.

Off-site impacts of implementing these BMPs was one of the evaluation criteria. If implementing the BMP would cause off-site impacts, the priority for development was lowered. The difficulty in obtaining easements or land purchase was considered in assigning the priority for implementation. The designations of low, medium and high are used for the level of effort needed.

3.2 Description of Analysis

The software used in the current BMP analysis is Hillsborough County's version of the Stormwater Management Model (HCSWMM), originally developed by the US Environmental Protection Agency. URS developed a detailed existing condition hydrologic and hydraulic model that estimates flood elevations throughout the watershed for various design storm events.

The Geographic Information System by Environmental Systems Research Institute (ESRI) was used for mapping and analysis. The projection is State Plane West, Zone 362, Datum HPGN, Units: feet, Spheroid GRS 1980.

Ground and peak flood elevations are based on the North American Vertical Datum (NAVD) of 1988. Topography was developed from multiple data sources: 2004 Pasco County LiDAR data, 1999-2000 Pinellas County LiDAR data, and 2002 Hillsborough County one foot elevation contours. The Pinellas County LiDAR data covers the Preserve. Numerous errors were found in this information. This limited the detailed analysis needed to evaluate the BMPs, particularly the impact of filling ditches. In 2009 the Florida Department of Environmental Management collected topographic information for Pinellas County that could be used in combination with field surveys to refine the analysis presented herein.

Ten of the thirteen preferred BMP alternatives (1-8, C1 and C2) were simulated by modifying the original HCSWMM. For each BMP alternative, model parameters were modified and the model was rerun for the following three storm events:

- 5-year, 24-hour
- 25-year, 24 –hour
- 100-year, 24-hour

The peak flood elevations for existing and proposed conditions for each of the modeled alternatives are tabulated in Section 3.3 and in the appendices. The tables in Section 3.3 only include the results for selected monitor nodes at locations that represent the effectiveness of the BMPs. Refer to Figures 3.2.1 and 3.2.2 for the locations of these monitor nodes. Complete node results for the existing condition models are included in Appendix A and results for the BMP alternative models are in Appendix B.

The runoff hydrographs for existing conditions and for selected alternatives are provided for each modeled alternative in Section 3.3 and for all the model alternatives in Section 4.4 at two of the monitor nodes. Node 497090 is located in the Brooker Creek channel west of Toniwoods. The majority of the most flood affected parts of Toniwoods drains to this location. The target elevation for the stormwater system outfall at Node 497090 is elevation 10.0'. The hydrographs for this node illustrate changes in the flood duration in the Tarpon Woods area by comparing the existing condition to the alternatives during the 5-year and 25-year events.

Node 493480 is located immediately upstream of where Channel A of Brooker Creek crosses Lora Lane. The hydrograph for this node illustrates the flood duration in the Preserve by comparing the existing condition to the alternatives for the 5-year event. Only the 5-year event is considered because the objective is to manage water levels during dry periods, so the flooding during the 25-year event is of less interest. The reduction in stage at day 4 after the beginning of the rain event is used to evaluate flood duration effectiveness.

Maps showing the difference in water surface elevations for the 25-year, 24-hour event are presented in Appendix C. Preliminary construction quantities estimates were determined for each alternative following the model evaluation. Cost estimates were then performed using

Florida Department of Transportation cost tables (2008) and pay items. Detailed cost sheets are provided in Appendix D.

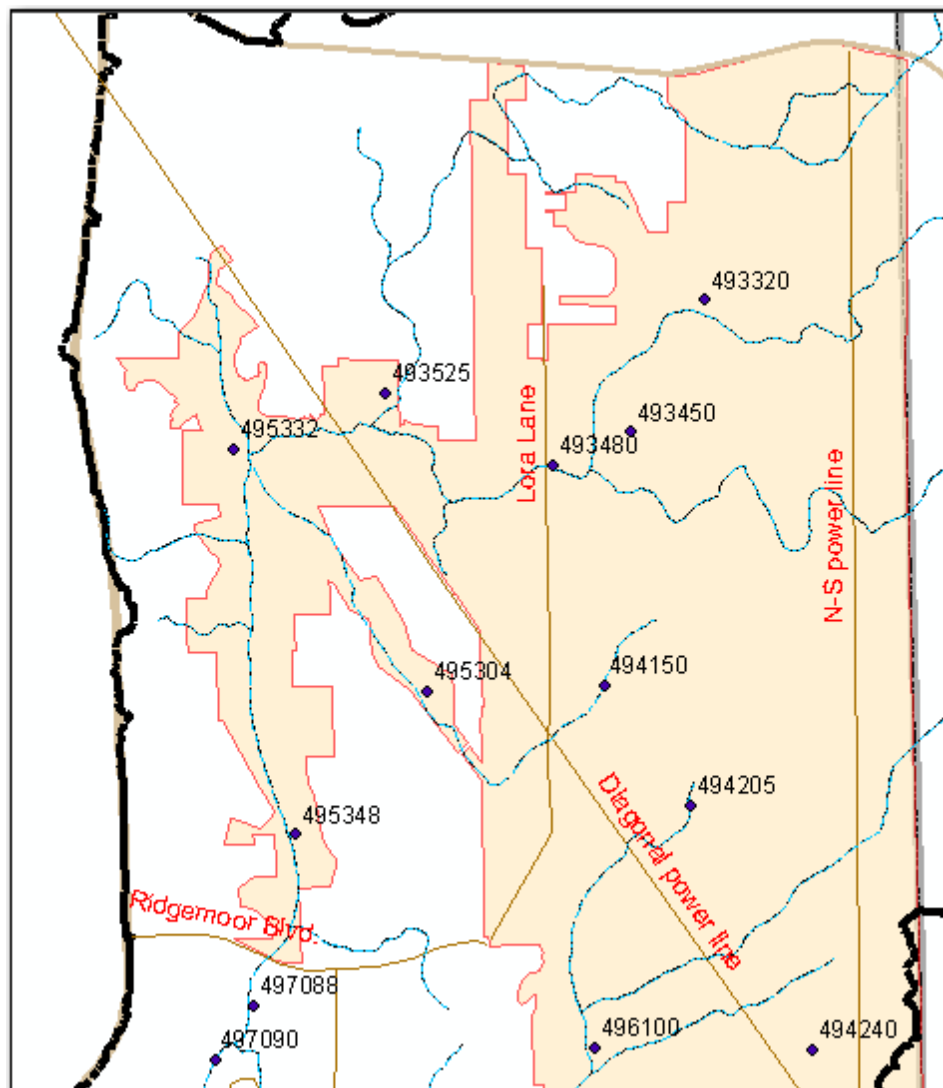


Figure 3.2.1: Monitor Nodes North of Ridgemoor Blvd.

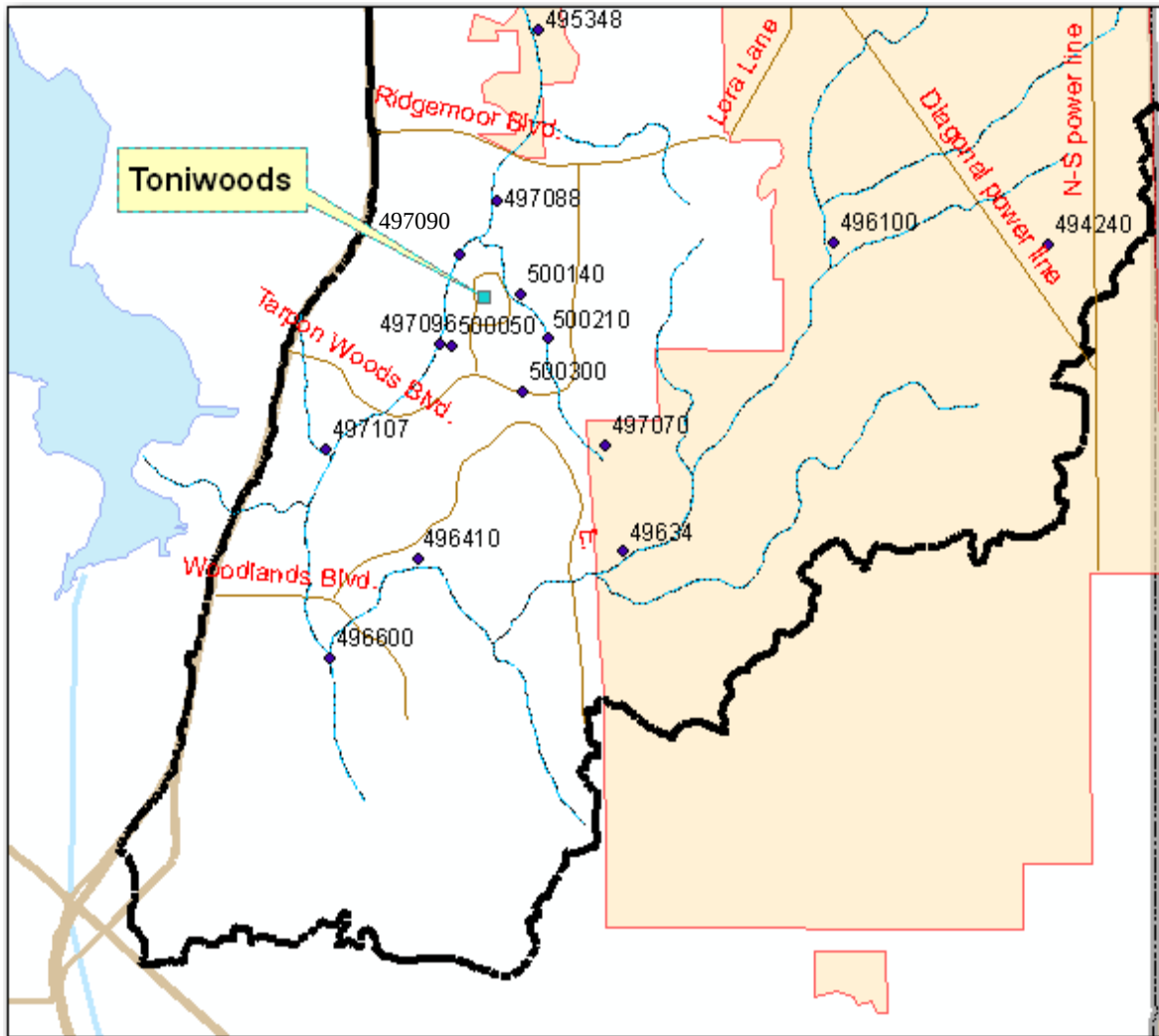


Figure 3.2.2: Monitor Nodes South of Ridgemoor Blvd.

3.3 Analysis of Alternatives

An evaluation of each of the preferred alternatives is given in this section. Existing and proposed conditions are presented. Important considerations are identified, model results are tabulated and discussed, and recommendations are provided.

3.3.1 Weir Construction/ Culvert Addition – Alternative 1

Alternative 1 is located in STR 23/27/16 and 14/27/16 at Lora Lane near the western boundary of the Preserve. Two culverts at one location, and four at another currently provide conveyance through Lora Lane. This alternative proposes adding a culvert at each location, and constructing weirs at the upstream end of each pipe. The weir crest would be set to increase upstream water levels and storage in the Preserve during low flow periods. The additional culverts will increase conveyance during major storm events. In addition, the ditch on the west side of Lora Lane

within the Preserve would be filled to the adjacent grade south of the Channel A crossing. A schematic of the weir concept is provided in Appendix E.

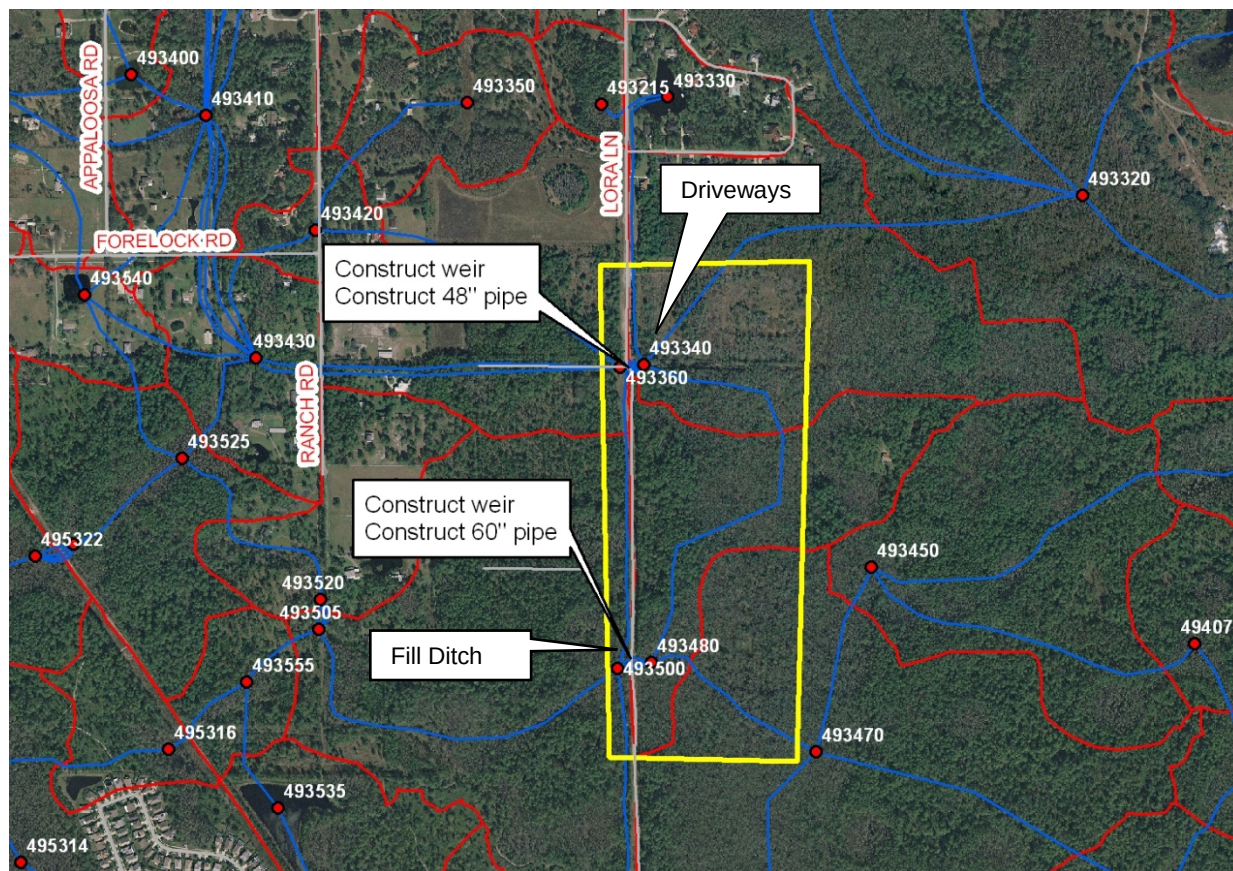


Figure 3.3.1a: Alternative 1 BMPs

Pre vs. Post Hydraulic Analysis

Existing Conditions:

- (4) 48" Circular culverts
- (2) 60" Circular culverts
- No roadway overtopping at Lora Ln. for the 25-year, 24 hour storm event
- Flood complaints near this area at Lora Ln.

Proposed Conditions:

- Construct weirs upstream of existing culverts (crest El. 19' NAVD 1988) - The design of these weirs can be modified in the future to facilitate water level control during low flow and flood events.
- Add 48" and 60" culverts for conveyance.
- Bring ditches on either side of driveway up to adjacent grade. Install several culverts along drive.

- Fill ditch on the west side of Lora Lane within the Preserve.

Environmental Concerns:

- Low – Land use is currently described as “Stream and Lake Swamps”, and “Other Open Lands (Rural).” Due to their locations, the wetlands could be excavated and may require mitigation.

Land Acquisition Requirements:

- Improvements located within the Preserve. No land acquisition required.

Engineering Complexity and Liability (Considerations for final design):

- Low complexity.
- Medium liability due to the potential of downstream impacts.

Cost Estimates:

Table 3.3.1a Construction Cost Estimates for Alternative 1

Name	Description	Estimated Construction Costs (US \$)
Alternative 1	Add culverts and construct upstream weir structures at Lora Lane. Fill the ditch west of Lora Lane	\$104,440

Model Results:

Flood Peaks - Peak flood elevations at the monitor nodes are tabulated in Table 3.3.1b for the existing and proposed conditions for the 5-, 25-, and 100-year 24-hour rainfall events. Refer to Appendices A and B for complete results. This alternative increases water levels upstream of the proposed weirs in the Preserve (nodes 493480, 493450, and 493320) between 0 and 0.2' during passage of each of the three events. This alternative reduces flood stages in Tarpon Woods between 0.1' and 0.4' during passage of the 3 events. The performance of this BMP is best during passage of the 5-year when compared to the other events.

The proposed weirs as modeled have upstream and downstream impacts on water levels during passage of these events. The increase in water level upstream of the weirs causes water to be diverted to the south along the power line road, increasing the flow rates from other crossings and resulting in overtopping of Lora Lane and the diagonal power line road. Flood stages are increased between 0 and 0.2' downstream (south) of Tarpon Woods Boulevard. Downstream of the proposed BMPs, peak flood stages are lowered in the Preserve wetlands west of Lora Lane and north of Ridgemoor Boulevard by a maximum of 0.5' for the three events because more water is retained in front of the weirs during passage of the flood.

Flood Duration – The duration of flooding would be increased in the Preserve at node 493480. Refer to Figure 3.3.1b. The drawdown rate is slowed from approximately one day to more than ten days. The duration of flooding in the Tarpon Woods area at node 497090 would be reduced

if this alternative is implemented. Four days into the 5- year event, the water level would be at elevation 8.4' with Alternative 1 in place, compared to 9.5' under existing conditions. Refer to Figure 3.3.1c for the 5-year comparison, and to Figure 4.2, in Section 4.0, for a comparison of water levels during the 25-year event.

Recommendations:

This alternative would increase stages and duration of flooding in the Preserve, and it would decrease stages and duration of flooding in the Tarpon Woods area. The cost is less than the cost of purchasing flood affected properties. It has an environmental benefit and the impacts would be low and mostly temporary during construction. An Environmental Resource Permit would be required. The permitting and land acquisition difficulty would be low. The cost is lower than any other alternative, but the changes in stages are not as beneficial as they would be for other BMPs. The implementation priority is high because of cost, it has benefits in the Preserve and downstream at Tarpon Woods, and the County owns the land.

Because the implementation of Alternative 1 BMPs was found to reduce the rate of drawdown of the water levels in the Preserve during an event-based analysis, it is reasonable to assume the same would occur during low flow periods. This means water levels in surrounding wetlands could be managed more effectively. The filling of ditches associated with this alternative could be performed as a separate project to provide restoration benefit to the Preserve.

Downstream in the Tarpon Woods area, faster drawdown in the main channel would allow water levels in the streets and yards to recede sooner. This is contingent on adequate capacity of the storm water system between the subdivision and the Brooker Creek channel.

Future design activities could include:

- Updating the model by incorporating the topographic information collected by Florida Department of Environmental Management, District field data collection, and additional surveys;
- Design of alternative weir controls to allow the County to manage water levels in the Preserve during low flows;
- Detailed evaluation of the impact of filling ditches in the Preserve;
- Model simulations using long term historical rainfall data to test these more detailed alternatives; and
- Evaluation and design of outlet systems for developments in Tarpon Woods in order to take advantage of the improvements in the main channel.

Table 3.3.1b Stage Comparison for Alternative 1

Node Name	5yr - 24Hr			25yr - 24Hr			100yr - 24hr			Location
	Exist.	Prop.	Diff.	Exist.	Prop.	Diff.	Exist.	Prop.	Diff.	
	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	
The Preserve										
493320	19.8	19.8	0.0	20.0	20.1	0.2	20.2	20.2	0.1	East of Lora Lane
493450	18.8	19.0	0.1	19.1	19.2	0.1	19.3	19.4	0.1	East of Lora Lane
493480	18.8	19.0	0.2	19.1	19.2	0.1	19.3	19.4	0.1	East of Lora Lane
494150	17.0	17.1	0.1	17.7	18.1	0.4	18.6	18.7	0.1	East of Lora Lane
494205	19.0	19.0	0.0	19.1	19.1	0.0	19.1	19.1	0.0	East of diagonal power line
494240	18.2	18.2	0.0	18.4	18.4	0.0	18.5	18.5	0.0	East of diagonal power line
493525	14.5	14.2	-0.2	14.9	14.6	-0.3	15.4	15.1	-0.3	West of Lora Lane
495332	13.3	12.8	-0.5	13.9	13.6	-0.4	14.5	14.2	-0.3	West of Lora Lane
495348	12.3	11.9	-0.5	12.9	12.6	-0.3	13.3	13.2	-0.2	North of Ridgemoor B.
495304	15.3	15.3	0.0	15.6	15.6	0.0	15.8	15.8	0.0	West of Coventry Village
496100	15.9	15.9	0.0	15.9	15.9	0.0	16.1	16.2	0.1	Northeast of Hawks Landing
496340	10.1	10.4	0.4	11.9	12.0	0.1	12.4	12.5	0.1	East of Warwick Hills
497070	10.0	10.0	0.0	10.1	10.1	0.0	11.7	11.9	0.2	South of Woodridge Lakes
Ridgemoor to Tarpon Woods Boulevard										
497088	10.4	10.1	-0.3	10.9	10.7	-0.2	11.5	11.3	-0.2	Brooker Creek Channel So. Of Ridgemoor Blvd.
497090	10.3	10.0	-0.3	10.8	10.6	-0.2	11.2	11.1	-0.1	Brooker Creek Channel So. Of Ridgemoor Blvd.
497096	8.6	8.2	-0.4	9.2	9.1	-0.1	9.8	9.7	-0.1	Brooker Creek Channel West of Tarpon Woods
Nodes around perimeter of Toniwoods										
500050	8.7	8.6	-0.1	9.2	9.1	-0.1	9.8	9.8	-0.1	Tarpon Woods Subdivision
500140	10.3	10.0	-0.3	10.8	10.6	-0.2	11.2	11.1	-0.1	Tarpon Woods Subdivision
500210	10.3	10.0	-0.3	10.8	10.7	-0.2	11.2	11.1	-0.1	Tarpon Woods Subdivision
500300	9.9	9.9	0.0	10.1	10.1	0.0	10.2	10.2	0.0	Tarpon Woods Subdivision
South of Tarpon Woods Boulevard										
497107	4.8	4.9	0.1	7.3	7.4	0.2	9.0	9.1	0.1	South of Tarpon Woods Blvd.
496410	7.9	8.1	0.2	8.5	8.5	0.0	9.3	9.4	0.1	East Woodlands Pkwy. Area
496600	7.3	7.5	0.2	8.3	8.3	0.1	9.2	9.3	0.1	South of Woodlands Blvd.

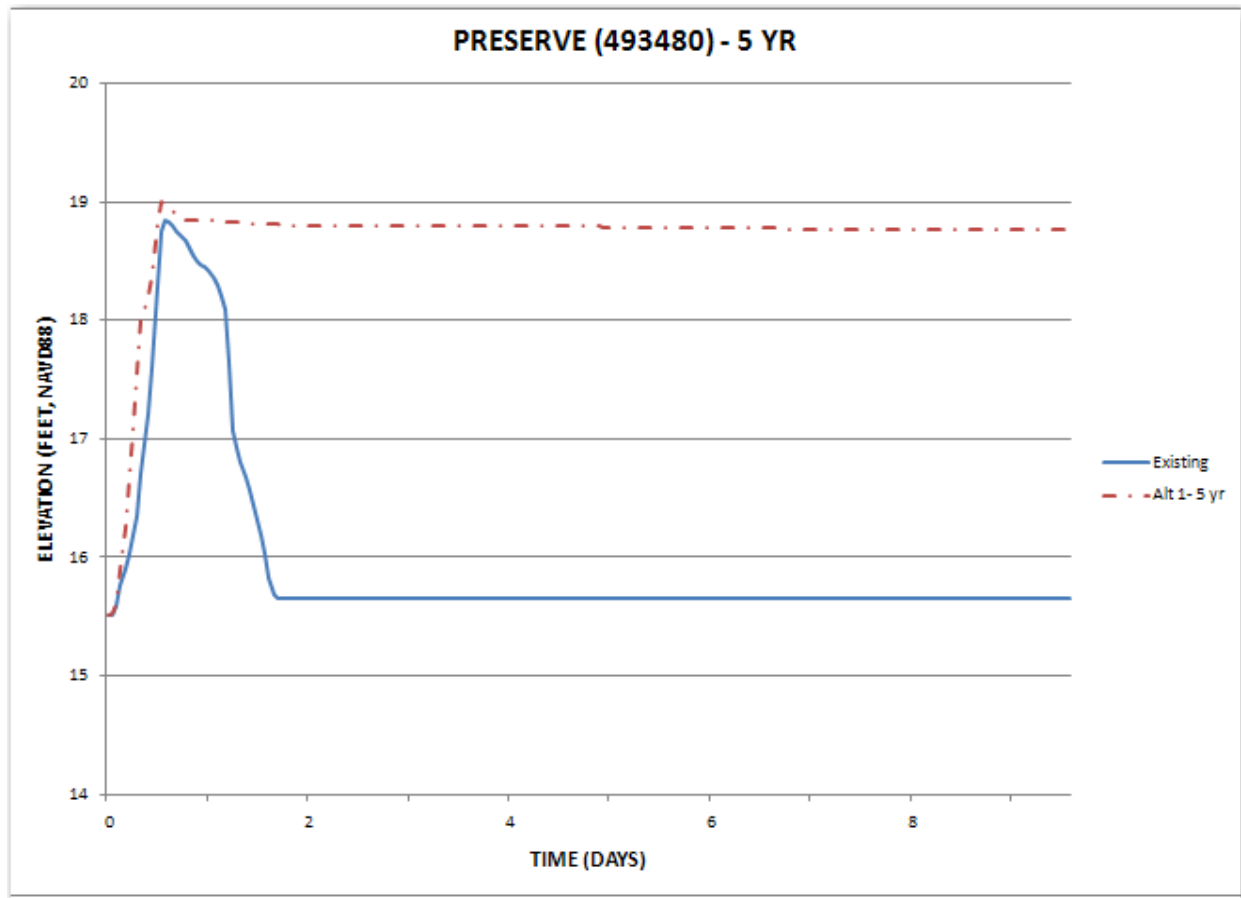


Figure 3.3.1b: Flood duration in Preserve, Alternative 1

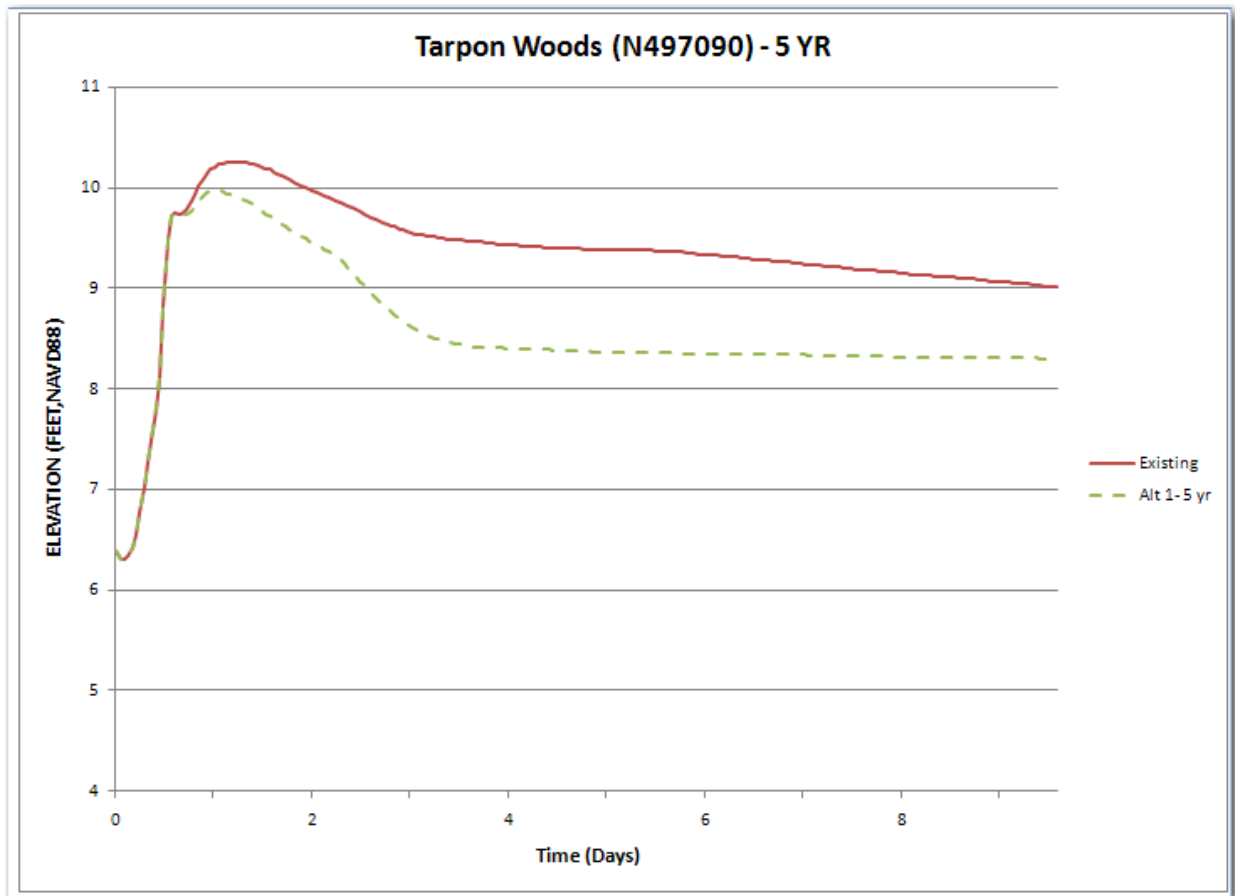
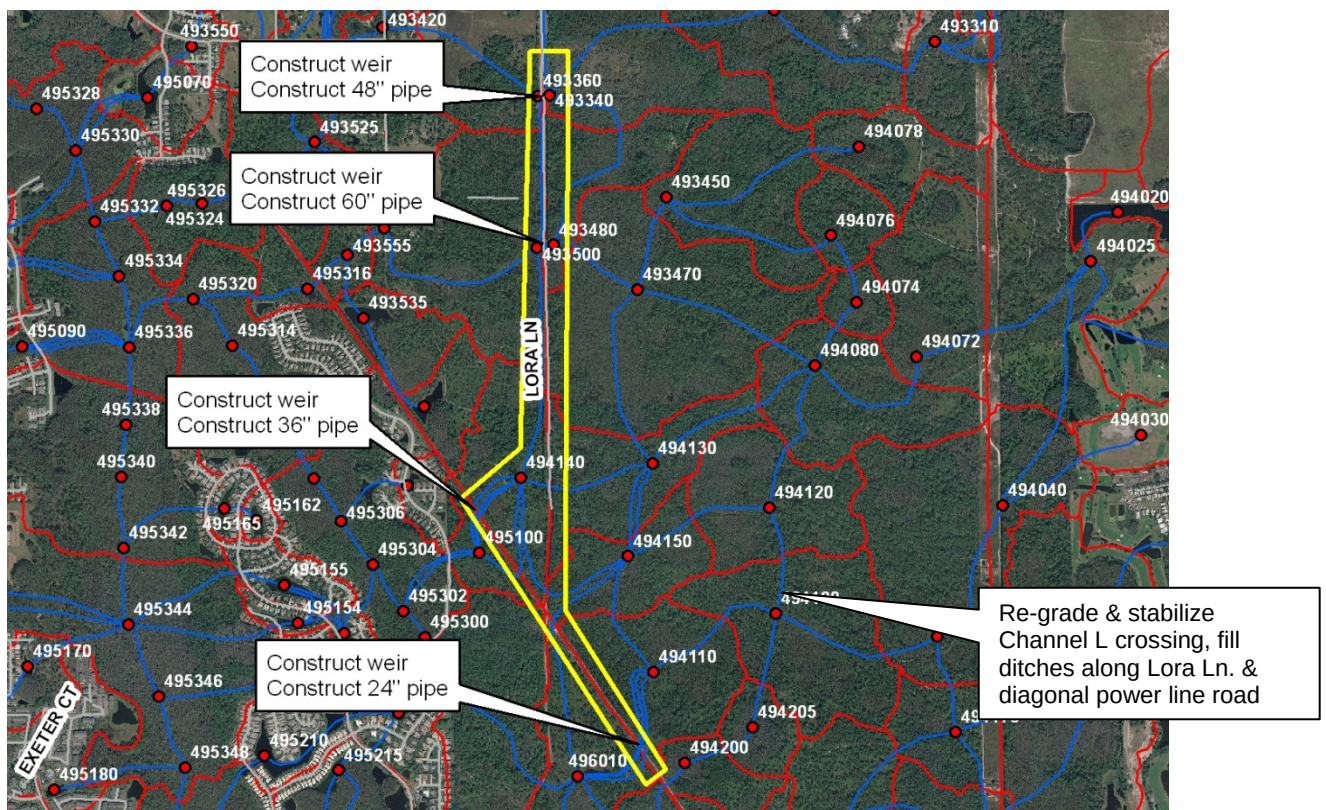


Figure 3.3.1c: Flood duration Tarpon Woods Area, Alternative 1

3.3.2 Weir Construction/ Culvert Addition – Alternative 2

Alternative 2 is located in STR 23/27/16 and 14/27/16. The area included in this alternative is Lora Lane and approximately one mile of the diagonal power-line road that crosses the western part of the Preserve. Two culverts at each of two crossings, and an overflow at the Channel L crossing currently provide conveyance through the power-line access road. Currently, the power line road at the Channel L crossing is at approximately elevation 15' and in need of stabilization. The ground elevation downstream of the crossing controls flow across the road at elevation 17'.

Alternative 2 includes all components of Alternative 1, plus installation of an additional culvert at the two existing crossings, construction of weirs upstream of the existing and proposed culverts, stabilization and raising of the Channel L crossing by one foot, and filling the ditch along the west side of Lora Lane for an extended length. The weir crests would be set to increase upstream water levels and storage during low flow periods. The additional culverts would increase conveyance during major storm events. A schematic of the weir concept is provided in Appendix E.



Pre vs. Post Hydraulic Analysis

Existing Conditions:

- (4) 48" Circular culverts
- (2) 60" Circular culverts
- (2) 24" Circular culverts
- (2) 36" Circular culverts
- No roadway overtopping at Lora Ln. for the 25-year, 24 hour storm event
- Flood complaints near this area at Lora Ln.

Proposed Conditions:

- Construct weirs upstream of existing culverts (Crest El. 19') – The design of these weirs can be modified in the future to facilitate water level control during low flow and flood events.
- Add 24", 36", 48", and 60" culverts for conveyance.
- Bring ditches on either side of driveway up to adjacent grade. Installation of several culverts along drive.
- Ditch on the west side of Lora Lane south of the Channel A crossing and the ditches parallel to the diagonal power-line access road within the Preserve would be filled to the adjacent grade or blocked with ditch blocks.
- Stabilize the Channel L crossing and raise the crest to elevation 18'

Environmental Concerns:

- Low – Land use is currently described as "Stream and Lake Swamps", and "Other Open Lands (Rural)". Due to their locations, the wetlands could be excavated and may require mitigation.

Land Acquisition Requirements:

- No land acquisition required.

Engineering Complexity and Liability (Considerations for final design):

- Low complexity.
- Medium liability due to the potential of downstream impacts.

Cost Estimates:

Table 3.3.2a Construction Cost Estimates for Alternative 2

Name	Description	Estimated Construction Costs (US \$)
Alternative 2	Implement Alternative 1 and add culverts and weir structures at two power line road crossings. Fill the road ditches along the diagonal power line road.	\$176,080

Model Results:

Flood Peaks - Peak flood elevations at the monitor nodes are tabulated in Table 3.3.2b for the existing and proposed conditions for the 5-, 25-, and 100-year events. Refer to Appendices A and B for complete results. This alternative increases water levels upstream of the proposed weirs in the Preserve directly east of Lora Lane between 0 and 0.2' during passage of each of the three events. Upstream of the Channel L crossing (Node 494150) the increase is 1.6'. This alternative reduces flood stages in the Tarpon Woods area between 0.1' and 0.4' during passage of the 3 events.

Installation of the weirs has upstream and downstream impacts on water levels during passage of these events. Upstream of the weirs, the increase in water level causes water to be diverted south along the power line road which increases the flow rates from other crossings and results in overtopping Lora Lane and the diagonal power line road. This causes an increase in water elevations of between 0 and 0.1' downstream of Tarpon Woods Boulevard. Water levels upstream of the Channel L crossing (Node 494150) increase by a maximum of 1.6' with this alternative in place. Downstream of the proposed weirs peak flood stages are lower in the wetlands between Lora Lane and Ridgemoor Boulevard, by a maximum of 0.5' for the three events, because more water is stored in front of the weirs during passage of the flood.

Flood Duration – The duration of flooding would be increased in the Preserve. The drawdown rate is slowed from approximately one day to more than ten days. Refer to Figure 3.3.2b. The duration of flooding in the Tarpon Woods area would be reduced if this alternative is implemented. Four days into the 5-year event simulation, the water level would be at elevation 9.5' with Alternative 2 in place compared to 8.3' under existing conditions. Refer to Figure 3.3.2c for the 5- year comparison, and to Figure 4.2, in Section 4, for a comparison of water levels during the 25-year event.

Recommendations:

This alternative would increase stages and duration of flooding in the Preserve, and it would decrease stages and duration of flooding in the Tarpon Woods area. The cost is less than the cost of purchasing flood affected properties, and except for Alternative 1, it less than the other alternatives. It has an environmental benefit, and the impacts would be low and mostly temporary during construction. An Environmental Resource Permit may be required. The level of difficulty for permitting and land acquisition would be low. The stage reduction in the Tarpon Woods area is not as beneficial as it would be for other BMPs. The changes in stages in the Preserve east of Lora Lane (except node 494150) and downstream in Tarpon Woods are virtually the same as for Alternative 1. The Channel L flow path would be restored. The implementation priority is high because it would benefit the Preserve and Tarpon Woods, land acquisition and permitting would not be difficult, and the cost is low compared to the other alternatives.

Because the implementation of Alternative 2 BMPs was found to reduce the rate of drawdown of the water levels in the Preserve during this event based analysis, it is reasonable to assume the same would occur during low flow periods. This means water levels in surrounding wetlands

could be managed more effectively. The filling of ditches associated with this alternative could be performed as a separate project to provide restoration benefit to the Preserve.

Downstream in the Tarpon Woods area faster drawdown in the main channel would allow water levels in the streets and yards to recede sooner. This is contingent on adequate capacity of the storm water system between the subdivision and the Brooker Creek channel.

Future design activities could include:

- Updating the model by incorporating the topographic information collected by Florida Department of Environmental Management, District field data collection, and additional surveys;
- Design of alternative weir controls to allow the County to manage water levels in the Preserve during low flows;
- Detailed evaluation of the impact of filling ditches in the Preserve;
- Model simulations using long term historical rainfall data to test these more detailed alternatives; and
- Evaluation and design of outlet systems for developments in Tarpon Woods in order to take advantage of the improvements in the main channel.

Table 3.3.2b Stage Comparison for Alternative 2

Node Name	5yr - 24Hr			25yr - 24Hr			100yr - 24hr			Location
	Exist.	Prop.	Diff.	Exist.	Prop.	Diff.	Exist.	Prop.	Diff.	
	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	
The Preserve										
493320	19.8	19.8	0.0	20.0	20.0	0.1	20.2	20.2	0.1	East of Lora Lane
493450	18.8	19.0	0.1	19.1	19.2	0.1	19.3	19.5	0.2	East of Lora Lane
493480	18.8	19.0	0.2	19.1	19.2	0.1	19.3	19.5	0.2	East of Lora Lane
494150	17.0	18.6	1.6	17.7	18.9	1.3	18.6	19.3	0.7	East of Lora Lane
494205	19.0	19.0	0.0	19.1	19.1	0.0	19.1	19.1	0.0	East of diagonal power line
494240	18.2	18.2	0.0	18.4	18.4	0.0	18.5	18.5	0.0	East of diagonal power line
493525	14.5	14.2	-0.2	14.9	14.6	-0.3	15.4	15.1	-0.3	West of Lora Lane
495332	13.3	12.8	-0.5	13.9	13.6	-0.3	14.5	14.2	-0.3	West of Lora Lane
495348	12.3	11.9	-0.5	12.9	12.6	-0.3	13.3	13.2	-0.2	North of Ridgemoor B.
495304	15.3	15.3	0.0	15.6	15.6	0.0	15.8	15.8	0.0	West of Coventry Village
496100	15.9	15.9	0.0	15.9	15.9	0.0	16.1	16.1	0.0	Northeast of Hawks Landing
496340	10.1	10.0	-0.1	11.9	12.0	0.1	12.4	12.5	0.0	East of Warwick Hills
497070	10.0	10.0	0.0	10.1	10.1	0.0	11.7	11.8	0.2	South of Woodridge Lakes
Ridgemoor to Tarpon Woods Boulevard										
497088	10.4	10.1	-0.3	10.9	10.7	-0.2	11.5	11.3	-0.2	Brooker Creek Channel So. Of Ridgemoor Blvd.
497090	10.3	10.0	-0.3	10.8	10.6	-0.2	11.2	11.1	-0.1	Brooker Creek Channel So. Of Ridgemoor Blvd.
497096	8.6	8.2	-0.4	9.2	9.1	-0.1	9.8	9.7	-0.1	Brooker Creek Channel West of Tarpon Woods
Nodes around perimeter of Toniwoods										
500050	8.7	8.6	-0.1	9.2	9.1	-0.1	9.8	9.7	-0.1	Tarpon Woods Subdivision
500140	10.3	10.0	-0.3	10.8	10.6	-0.2	11.2	11.1	-0.1	Tarpon Woods Subdivision
500210	10.3	10.0	-0.3	10.8	10.7	-0.2	11.2	11.1	-0.1	Tarpon Woods Subdivision
500300	9.9	9.9	0.0	10.1	10.1	0.0	10.2	10.2	0.0	Tarpon Woods Subdivision
South of Tarpon Woods Boulevard										
497107	4.8	4.8	0.1	7.3	7.4	0.1	9.0	9.1	0.0	South of Tarpon Woods Blvd.
496410	7.9	8.0	0.1	8.5	8.5	0.0	9.3	9.4	0.1	East Woodlands Pkwy. Area
496600	7.3	7.4	0.1	8.3	8.3	0.1	9.2	9.3	0.1	South of Woodlands Blvd.

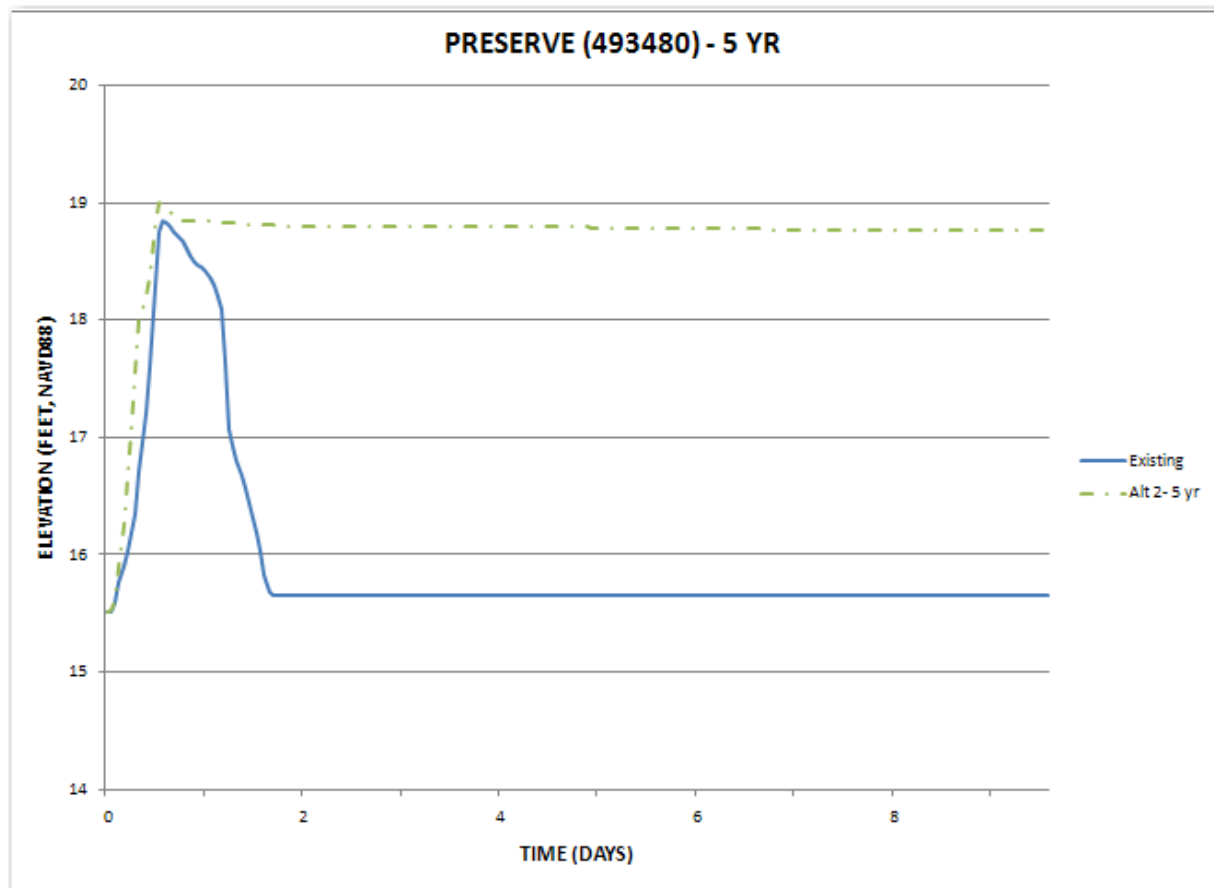


Figure 3.3.2b: Flood duration in Preserve, Alternative 2

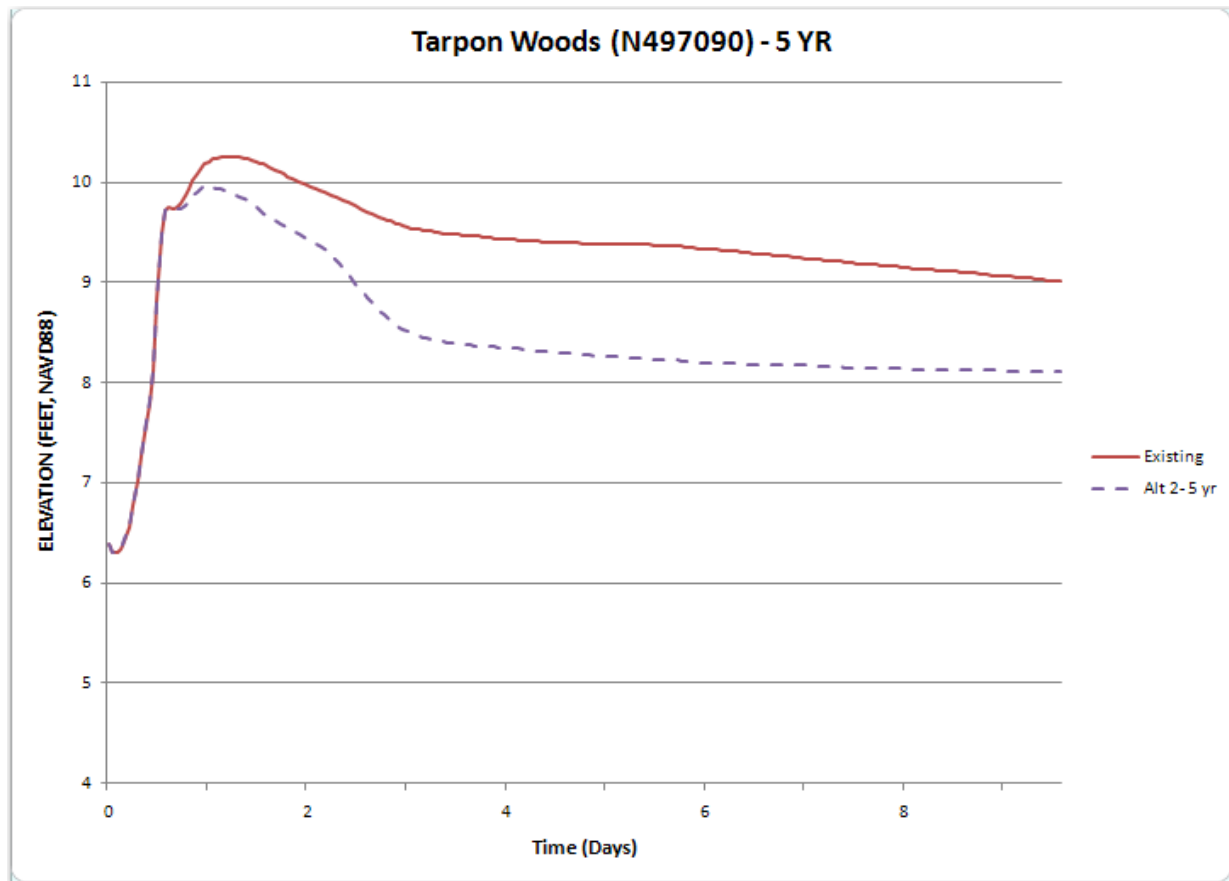


Figure 3.3.2c: Flood duration in Tarpon Woods, Alternative 2

3.3.3 Weir Construction/ Culvert/ Road Grading – Alternative 3

Alternative 3 is located in STR 23/27/16 and 14/27/16 at Lora Lane near the western boundary of the Preserve. Currently storm water overtops part of Lora Lane and the diagonal power line road during passage of the 5- and the 25- year storm events. This alternative is designed to store this water until the water passes through the culverts at the crossings. This should reduce the peak flow rates.

This alternative includes all of the same components as Alternative 2, but also includes raising the existing dirt access road to elevation 21 feet to limit flows overtopping the roadway. The roadway would be raised for a length of approximately 16,000 feet from the Preserve entrance at Lora Lane south to the end of the diagonal power line access road. Although not part of this BMP analyzed herein, the Channel L flow path would be maintained by adding culverts and a weir during future design work. A schematic of the weir concept is provided in Appendix E.

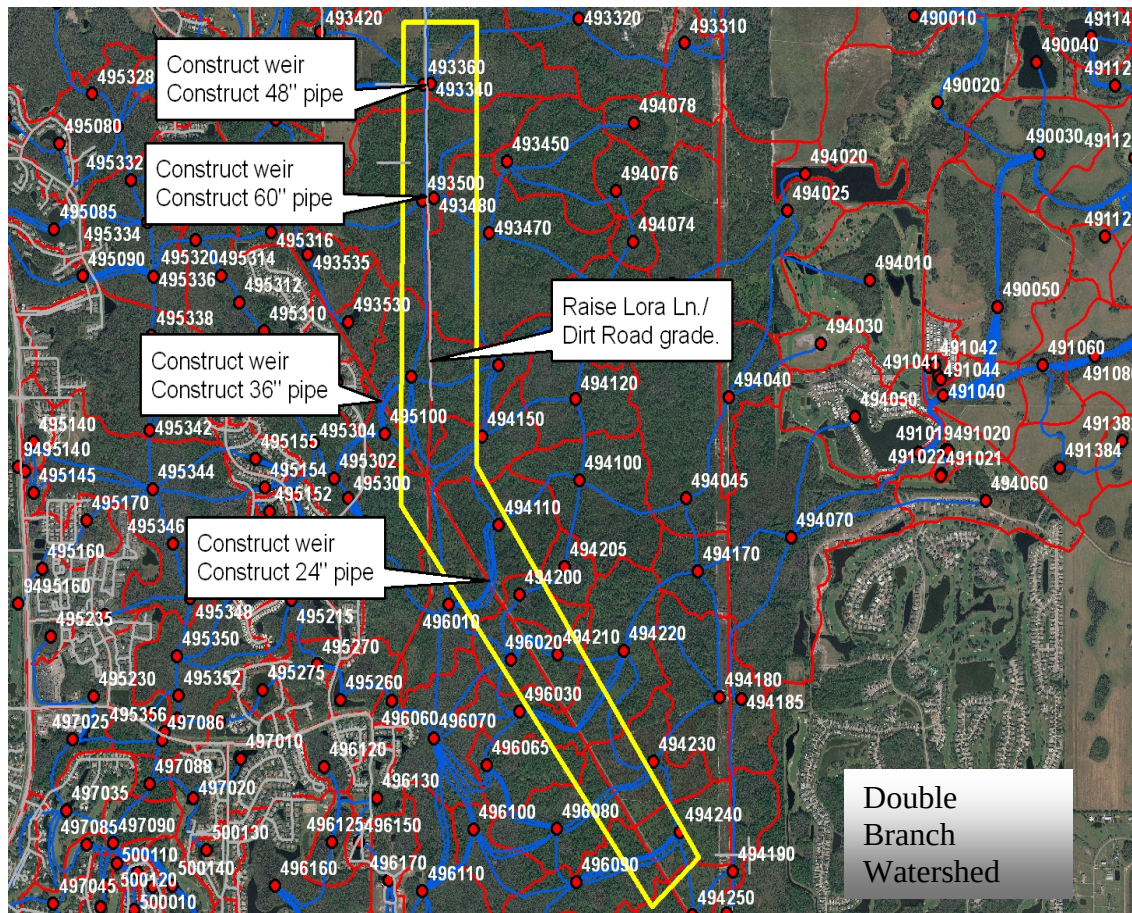


Figure 3.3.3a: Alternative 3 BMPs

Pre vs. Post Hydraulic Analysis

Existing Conditions:

- (4) 48" Circular culverts
- (2) 60" Circular culverts
- (2) 24" Circular culverts
- (2) 36" Circular culverts
- Flood complaints near this area at Lora Ln.

Proposed Conditions:

- Construct weirs upstream of existing culverts (crest El. 19') – The design of these weirs can be modified in the future to facilitate water level control during low flow and flood events.
- Add 24", 36", 48", and 60" culverts for conveyance.
- Bring ditches on either side of driveway up to the adjacent grade. Installation of several culverts along drive.
- Ditch on the west side of Lora Lane south of the Channel A crossing and the ditches parallel to the diagonal power line access road within the Preserve are to be filled to the adjacent grade or blocked with ditch blocks.
- Raise existing dirt road grade to El. 21' NAVD88 for a length of approximately 16,000 feet from the Preserve entrance at Lora Lane south to the end of the diagonal power line access road.

Environmental Concerns:

- Medium – Land use is currently described as "Stream and Lake Swamps", "Cypress", "Pine Flatwoods", "Wetland Forested Mixed", and "Wetland Coniferous Forest." Fill and heavy construction equipment are necessary to raise dirt road grade. Due to their locations, the wetlands could be excavated and may require mitigation.

Land Acquisition Requirements:

- No land acquisition required.

Engineering Complexity and Liability (Considerations for final design):

- Medium complexity.
- Medium liability due to the potential of downstream impacts.

Cost Estimates:

Table 3.3.3a Construction Cost Estimates for Alternative 3

Name	Description	Estimated Construction Costs (US \$)
Alternative 3	Implement Alternative 2 and raise the elevation of approximately 16,000' of Lora Lane and the diagonal power line road by three feet.	\$6,332,800

Model Results:

Flood Peaks - Peak flood elevations at the monitor nodes are tabulated in Table 3.3.3b for the existing and proposed conditions for the 5-, 25-, and 100- year events. Refer to Appendices A and B for complete results. This alternative increases water levels upstream of the proposed weirs in the Preserve east of Lora Lane between 0.4' and 1.1' during passage of each of the three events. Further to the south of these weirs, and east of the diagonal power line road, the water level increase is more than 2'. This alternative reduces flood stages in the Tarpon Woods area between 0.1' and 0.3' during passage of the 3 events.

Installation of the weirs and raising the road impacts water levels upstream and downstream during passage of these events. The increase in water level upstream of the weirs causes water to be diverted south along the power line road, potentially forcing water across the watershed boundary into Double Branch Watershed. Stages south of Tarpon Woods Boulevard decrease between 0.3' and 1.7'. Downstream of the proposed weirs at Lora Lane, peak flood stages vary from a drop of 0.2 to 0.3' for the 5-year event to an increase of 0.2 to 0.4' for the 100-year event in the wetlands between Lora Lane and Ridgemoor Boulevard.

Flood Duration – The duration of flooding would be increased in the Preserve. The drawdown rate is slowed from approximately one day to more than ten days. Refer to Figure 3.3.3b. The duration of flooding in the Tarpon Woods area would not change if this alternative is implemented. Refer to Figure 3.3.3c for the 5- year comparison, and to Figure 4.2, in Section 4, for a comparison of water levels during the 25-year event.

Recommendations:

This alternative would increase stages and duration of flooding in the Preserve and would decrease stages, but not the duration of flooding in the Tarpon Woods area. The cost is less than the cost of purchasing flood affected properties. It has an environmental benefit, and the impacts would be medium due to the addition of fill to the road. Restoration of Channel L, G and GG were not considered in the analysis. An Environmental Resource Permit would be required. The permitting difficulty would be medium. The County owns the property, but an easement would be needed for work along the diagonal power line. There is the potential of discharging storm water into Double Branch Watershed if this alternative were to be implemented. The implementation priority is medium because of the potential spillage of flow into Double Branch Watershed and because restoration of historical flow paths was not included in the analysis. Both of these issues could likely be resolved in the future with additional design effort.

Because the implementation of Alternative 3 BMPs was found to reduce the rate of drawdown of the water levels in the Preserve during this event based analysis, it is reasonable to assume the same would occur during low flow periods. This means water levels in surrounding wetlands could be managed more effectively. The filling of ditches associated with this alternative could be performed as a separate project to provide restoration benefit to the Preserve.

Downstream in the Tarpon Woods area, faster drawdown in the main channel would allow water levels in the streets and yards to recede sooner. This is contingent on adequate capacity of the storm water system between the subdivision and the Brooker Creek channel.

Future design activities could include:

- Updating the model by incorporating the topographic information collected by Florida Department of Environmental Management, District field data collection, and additional surveys;
- Detailed event based analysis of this alternative to determine feasibility;
- Design of alternative weir controls to allow the County to manage water levels in the Preserve during low flows;
- Detailed evaluation of the impact of filling ditches in the Preserve;
- Model simulations using long term historical rainfall data to test these more detailed alternatives; and
- Evaluation and design of outlet systems for developments in Tarpon Woods in order to take advantage of the improvements in the main channel.

Table 3.3.3b Stage Comparison for Alternative 3

Node Name	5yr - 24Hr			25yr - 24Hr			100yr - 24hr			Location
	Exist.	Prop.	Diff.	Exist.	Prop.	Diff.	Exist.	Prop.	Diff.	
	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	
The Preserve										
493320	19.8	20.7	0.9	20.0	21.1	1.2	20.2	21.5	1.4	East of Lora Lane
493450	18.8	19.3	0.4	19.1	19.8	0.8	19.3	20.4	1.1	East of Lora Lane
493480	18.8	19.3	0.4	19.1	19.8	0.7	19.3	20.4	1.1	East of Lora Lane
494150	17.0	19.3	2.3	17.7	19.8	2.2	18.6	20.4	1.8	East of Lora Lane
494205	19.0	19.3	0.3	19.1	19.8	0.8	19.1	20.4	1.3	East of diagonal power line
494240	18.2	19.7	1.5	18.4	20.2	1.8	18.5	20.8	2.3	East of diagonal power line
493525	14.5	14.3	-0.2	14.9	14.8	0.0	15.4	15.7	0.3	West of Lora Lane
495332	13.3	13.0	-0.3	13.9	14.0	0.1	14.5	14.9	0.4	West of Lora Lane
495348	12.3	12.0	-0.3	12.9	12.9	0.1	13.3	13.5	0.2	North of Ridgemoor B.
495304	15.3	15.3	0.0	15.6	15.6	0.0	15.8	15.8	0.0	West of Coventry Village
496100	15.9	15.9	0.0	15.9	15.9	0.0	16.1	15.9	-0.2	Northeast of Hawks Landing
496340	10.1	8.8	-1.3	11.9	10.3	-1.6	12.4	11.3	-1.2	East of Warwick Hills
497070	10.0	10.0	0.0	10.1	10.1	0.0	11.7	10.2	-1.5	South of Woodridge Lakes
Ridgemoor to Tarpon Woods Boulevard										
497088	10.4	10.1	-0.2	10.9	10.9	0.0	11.5	11.7	0.2	Brooker Creek Channel So. Of Ridgemoor Blvd.
497090	10.3	10.0	-0.2	10.8	10.8	0.0	11.2	11.3	0.1	Brooker Creek Channel So. Of Ridgemoor Blvd.
497096	8.6	8.3	-0.3	9.2	9.2	0.0	9.8	9.7	-0.1	West of Tarpon Woods
Nodes around perimeter of Toniwoods										
500050	8.7	8.6	-0.1	9.2	9.2	0.0	9.8	9.7	-0.1	Tarpon Woods Subdivision
500140	10.3	10.0	-0.2	10.8	10.8	0.0	11.2	11.3	0.1	Tarpon Woods Subdivision
500210	10.3	10.0	-0.2	10.8	10.8	0.0	11.2	11.3	0.1	Tarpon Woods Subdivision
500300	9.9	9.9	0.0	10.1	10.1	0.0	10.2	10.2	0.0	Tarpon Woods Subdivision
South of Tarpon Woods Boulevard										
497107	4.8	4.4	-0.3	7.3	5.6	-1.7	9.0	7.4	-1.7	South of Tarpon Woods Blvd.
496410	7.9	6.7	-1.2	8.5	8.1	-0.4	9.3	8.4	-0.9	East Woodlands Pkwy. Area
496600	7.3	6.5	-0.8	8.3	7.6	-0.7	9.2	8.2	-1.0	South of Woodlands Blvd.

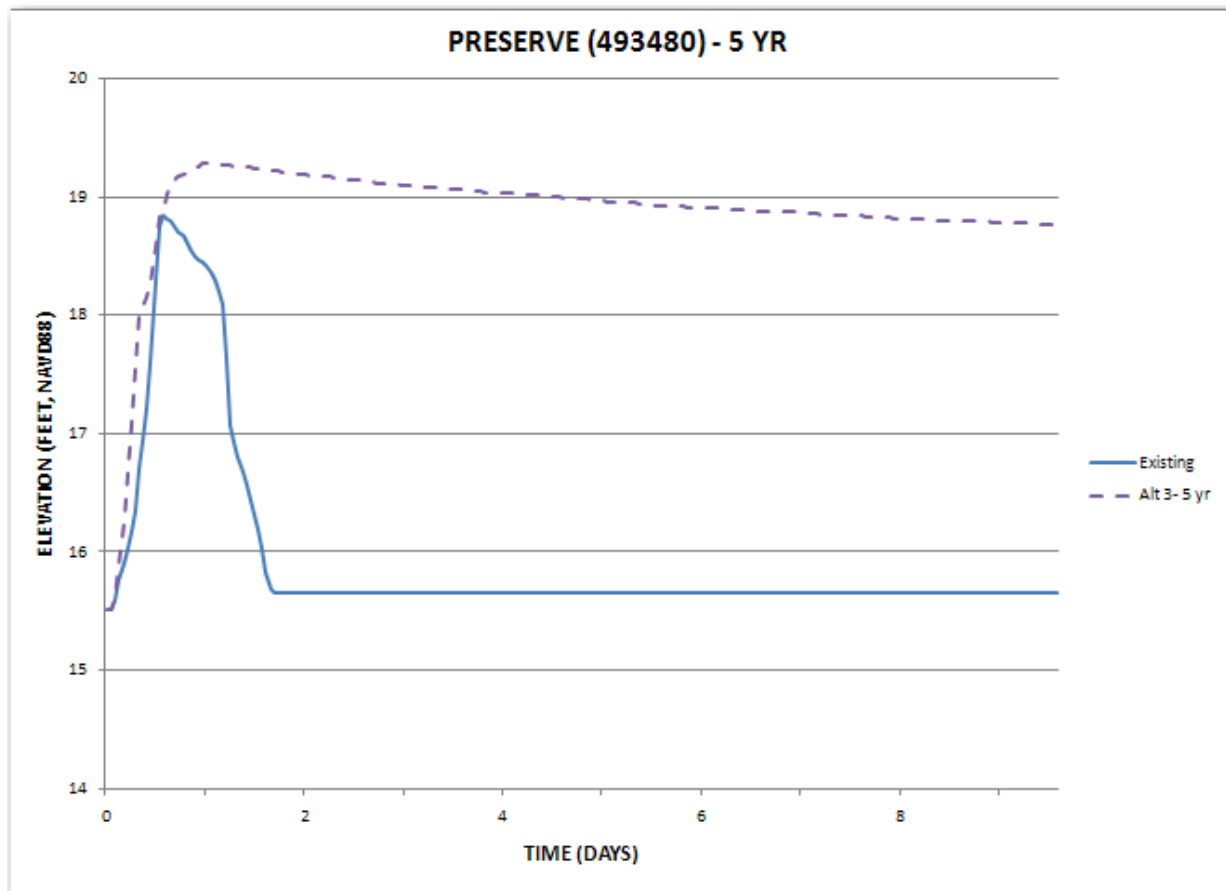


Figure 3.3.3b: Flood duration in Preserve, Alternative 3

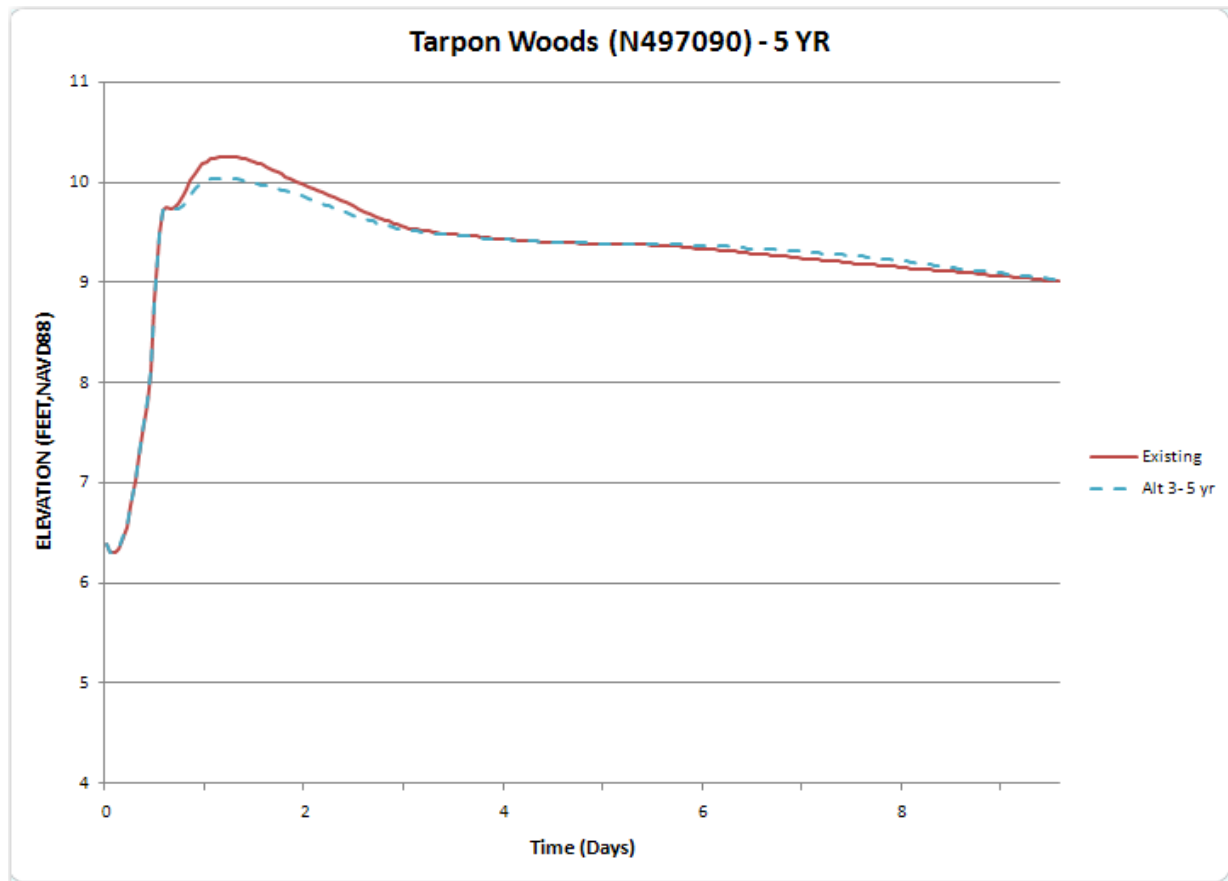


Figure 3.3.3c: Flood duration in Tarpon Woods, Alternative 3

3.3.4 Diversion Channel – Alternative 4

Alternative 4 is located in STR 36/27/16, 26/27/16, 25/27/16, 23/27/16, and 14/27/16. This alternative includes construction of an 8.6-mile long diversion channel to allow high flows from Brooker Creek to be diverted south along the diagonal power line road, to the north-south power line and then west to the Lake Tarpon Canal. An operable weir structure would also be constructed to control discharge rates and allow flow to follow the existing condition path during the dry season.

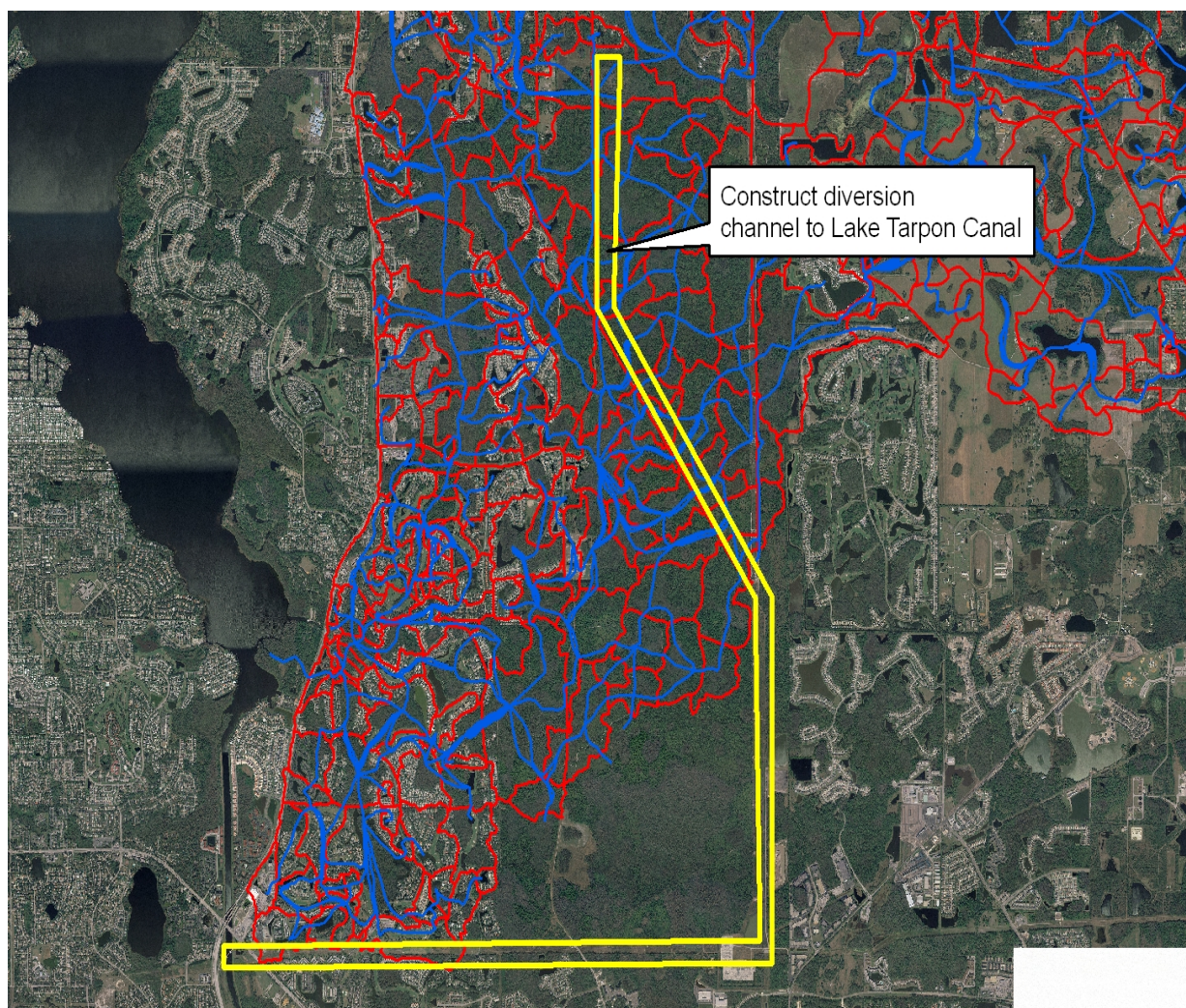


Figure 3.3.4a: Alternative 4 BMPs

Pre vs. Post Hydraulic Analysis

Existing Conditions:

- Progress Energy power line easement / Ditch
- Several culvert crossings on Lora Ln. and the diagonal power line corridor
- Several flood overtopping locations at dirt road

Proposed Conditions:

- Construct an 8.6-mile long diversion channel to allow high flows to be diverted along the diagonal power line, to the north-south power line and then west to the Lake Tarpon Canal.
- Construct operable weir structure to control discharge rates and allow flow to follow the existing condition path during the dry season.

Environmental Concerns:

- High –Land use is currently described as “Stream and Lake Swamps”, “Cypress”, “Pine Flatwoods”, “Wetland Forested Mixed”, “Wetland Coniferous Forest”, and “Utilities”. Heavy construction would cause negative impacts to the Preserve due to destruction of native upland and wetland habitats and impacts to wildlife movement within the Preserve. Increased discharges to the Lake Tarpon Canal would occur, as well as possible alteration of base flow in the Brooker Creek main channel. Lake Tarpon Canal is on the State Impaired Waters list.

Land Acquisition Requirements:

- Land acquisition or easements required for the outfall to the Lake Tarpon Canal.

Engineering Complexity and Liability (Considerations for final design):

- High complexity.
- Medium liability due to the potential of downstream impacts.

Cost Estimates:

Table 3.3.4a Construction Cost Estimates for Alternative 4

Name	Description	Estimated Construction Costs (US \$)
Alternative 4	Diversion channel adjacent to Lora Lane and diagonal power line road to outfall to Lake Tarpon Canal (8.6 miles)	\$67,419,170

Model Results:

Flood Peaks - Peak flood elevations at the monitor nodes are tabulated in Tables 3.3.4b for the existing and proposed conditions for the 5- , 25- , and 100- year events. Refer to Appendices A and B for complete stage results. This alternative increases flood stages in the Preserve, and it decreases stages in the Tarpon Woods area. In the Preserve east of Lora Lane the increase in

stage is 0' for the 5-year, a maximum of 0.6' for the 25- year, and a maximum of 1.2' for the 100 year event. East of the channel L crossing (Node 494150) the stage increases by a maximum of 1.9'. Still in the Preserve, further south and east of the diagonal road the stage would increase between 0' for the 5- year and 1.4' for the 100- year events. Water levels in wetlands downstream of Lora Lane between Lora Lane and Ridgemoor Boulevard drop between 0.2' and 0.6'.

Flood stages in the Tarpon Woods area are reduced between 0' and 0.5'. Flood stages are also lower south of Tarpon Woods Boulevard. The drop in this area is between 0.4' and 1.8'.

Flood Duration – The duration of flooding would be increased in the Preserve from one day for existing conditions to more than 10 days should this alternative be implemented. Refer to Figure 3.3.4b. The duration of flooding in the Tarpon Woods area would be reduced since at four days elapsed time for the 5- year event, the elevation is decreased from 9.5' for the existing condition to 8.0' for the proposed condition. Refer to Figure 3.3.4c for the 5- year comparison, and to Figure 4.2, in Section 4, for a comparison of water levels during the 25-year event.

Recommendations:

This alternative would increase stages and duration within the Preserve, and it would decrease stages and duration in the Tarpon Woods area. It also causes stages south of Tarpon Woods Boulevard to drop. The cost is higher than the cost of purchasing flood affected properties. It has an environmental benefit, but the impacts would be high. An Environmental Resource Permit would be required. Permitting would be extremely difficult, and land acquisition could be difficult in areas outside the Preserve. The implementation priority is low because of the cost, impacts, permitting, and potential land acquisition issues.

Downstream in the Tarpon Woods area, faster drawdown in the main channel would allow water levels in the streets and yards to recede sooner. This is contingent on adequate capacity of the storm water system between the subdivision and the Brooker Creek channel.

Table 3.3.4b Stage Comparison for Alternative 4

Node Name	5yr - 24Hr			25yr - 24Hr			100yr - 24hr			Location
	Exist.	Prop.	Diff.	Exist.	Prop.	Diff.	Exist.	Prop.	Diff.	
	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	
The Preserve										
493320	19.8	19.8	0.0	20.0	20.1	0.1	20.2	20.6	0.4	East of Lora Lane
493450	18.8	18.8	0.0	19.1	19.6	0.6	19.3	20.5	1.2	East of Lora Lane
493480	18.8	18.8	0.0	19.1	19.6	0.5	19.3	20.5	1.2	East of Lora Lane
494150	17.0	18.6	1.6	17.7	19.6	1.9	18.6	20.5	1.9	East of Lora Lane
494205	19.0	19.0	0.0	19.1	19.6	0.5	19.1	20.5	1.4	East of diagonal power line
494240	18.2	19.0	0.8	18.4	19.1	0.7	18.5	19.1	0.6	East of diagonal power line
493525	14.5	14.2	-0.3	14.9	14.5	-0.3	15.4	15.0	-0.4	West of Lora Lane
495332	13.3	12.7	-0.6	13.9	13.5	-0.4	14.5	14.2	-0.3	West of Lora Lane
495348	12.3	11.8	-0.5	12.9	12.6	-0.3	13.3	13.1	-0.2	North of Ridgemoor B.
495304	15.3	15.3	0.0	15.6	15.6	0.0	15.8	15.8	0.0	West of Coventry Village
496100	15.9	15.9	0.0	15.9	15.9	0.0	16.1	15.9	-0.2	Northeast of Hawks Landing
496340	10.1	8.8	-1.3	11.9	10.3	-1.6	12.4	11.2	-1.3	East of Warwick Hills
497070	10.0	10.0	0.0	10.1	10.1	0.0	11.7	10.2	-1.5	South of Woodridge Lakes
Ridgemoor to Tarpon Woods Boulevard										
497088	10.4	10.0	-0.4	10.9	10.7	-0.2	11.5	11.2	-0.3	Brooker Creek Channel So. Of Ridgemoor Blvd.
497090	10.3	9.9	-0.3	10.8	10.6	-0.2	11.2	11.0	-0.2	Brooker Creek Channel So. Of Ridgemoor Blvd.
497096	8.6	8.1	-0.5	9.2	9.0	-0.2	9.8	9.3	-0.4	West of Tarpon Woods
Nodes around perimeter of Toniwoods										
500050	8.7	8.6	-0.1	9.2	9.1	-0.2	9.8	9.4	-0.4	Tarpon Woods Subdivision
500140	10.3	9.9	-0.4	10.8	10.6	-0.2	11.2	11.0	-0.2	Tarpon Woods Subdivision
500210	10.3	9.9	-0.4	10.8	10.6	-0.2	11.2	11.1	-0.1	Tarpon Woods Subdivision
500300	9.9	9.9	0.0	10.1	10.1	0.0	10.2	10.2	0.0	Tarpon Woods Subdivision
South of Tarpon Woods Boulevard										
497107	4.8	4.4	-0.4	7.3	5.5	-1.8	9.0	7.2	-1.8	South of Tarpon Woods Blvd.
496410	7.9	6.6	-1.3	8.5	8.1	-0.4	9.3	8.4	-0.9	East Woodlands Pkwy. Area
496600	7.3	6.5	-0.8	8.3	7.6	-0.7	9.2	8.2	-1.0	South of Woodlands Blvd.

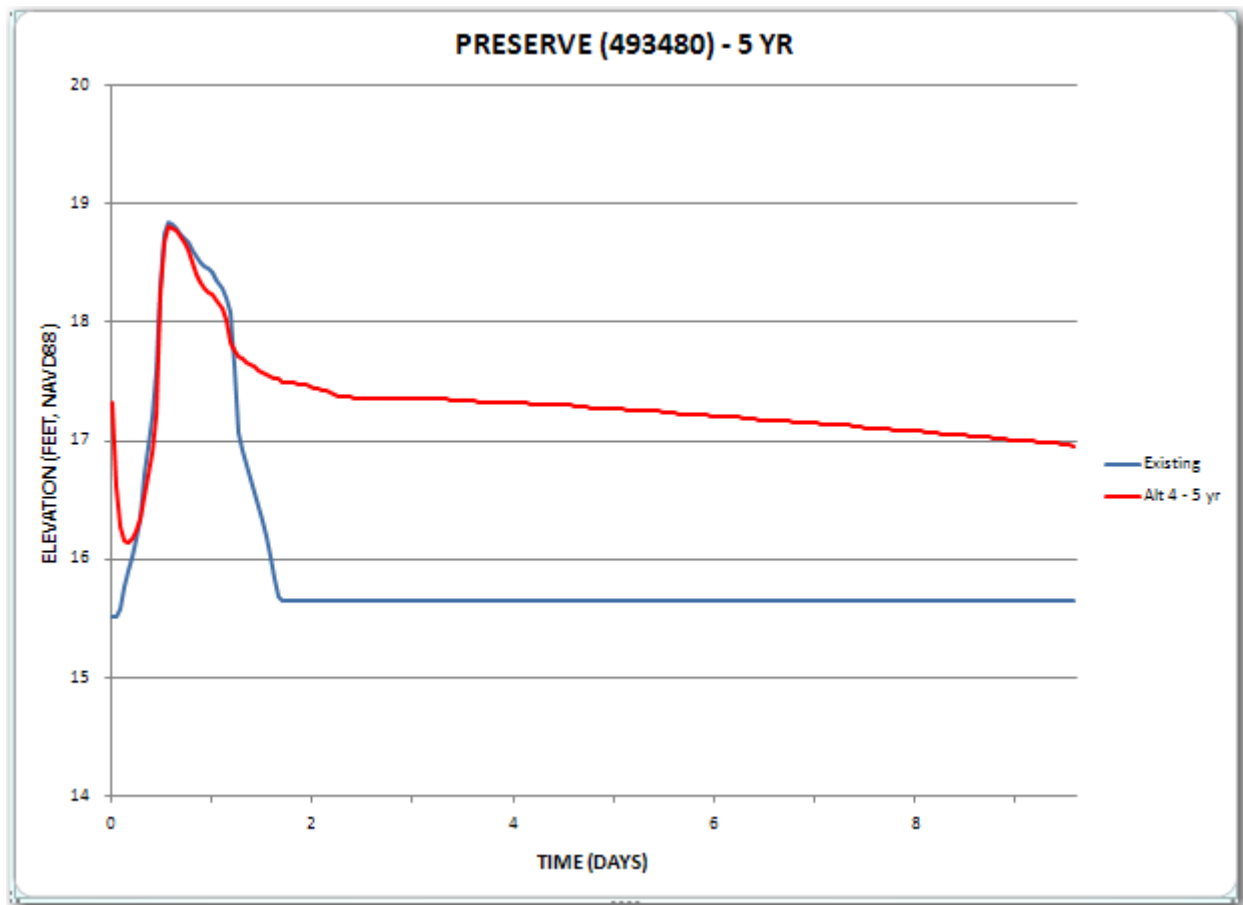


Figure 3.3.4b: Flood duration in Preserve, Alternative 4

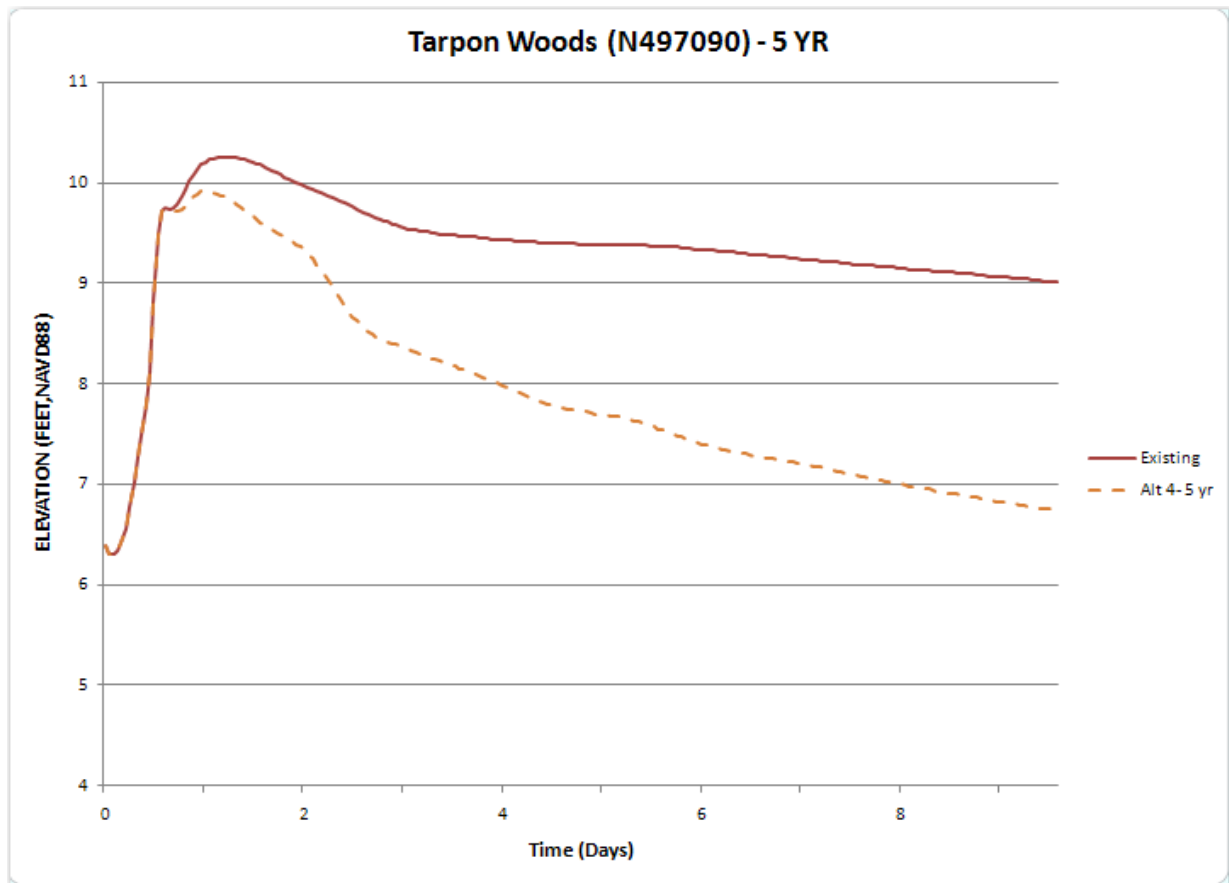


Figure 3.3.4c: Flood duration in Tarpon Woods, Alternative 4

3.3.5 Pumping Station with Force Main – Alternative 5

Alternative 5 is located in STR 27/27/16 and 34/27/16 just upstream of Ridgemoor Boulevard. This alternative would include the construction of a pump system and force main to divert water from Brooker Creek during high flows directly to Lake Tarpon. The 72-inch force main would be constructed along Ridgemoor Boulevard to East Lake Road and then west towards Lake Tarpon through the golf course.

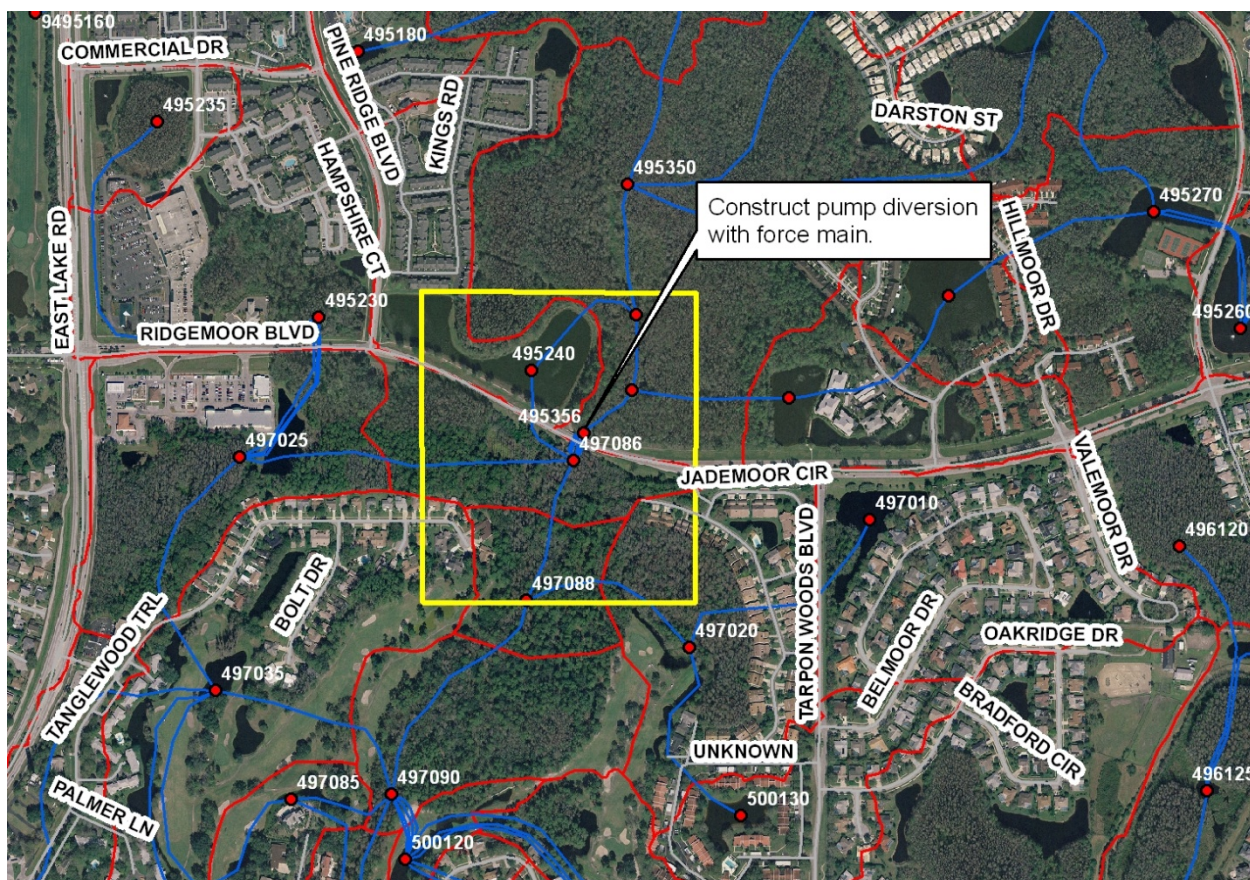


Figure 3.3.5a: Alternative 5 BMPs

Pre vs. Post Hydraulic Analysis

Existing Conditions:

- Bridge at Ridgemoor Boulevard.
- No roadway overtopping for the modeled storm events.
- Flood complaints south of this area at Tarpon Woods Boulevard and Toniwood Lane.

Proposed Conditions:

- Construct stormwater pump system and 72-inch force main to divert water west directly to Lake Tarpon.

Environmental Concerns:

- Medium – Land use is currently described as “Stream and Lake Swamps”, “Transportation”, “Commercial”, and “Wetland Forested Mixed”. Due to their locations, the wetlands could be excavated and may require mitigation.

Land Acquisition Requirements:

- Land acquisition/easements required to construct outfall line to Lake Tarpon.

Engineering Complexity and Liability (Considerations for final design):

- Medium complexity.
- Medium liability due to the potential of downstream impacts.

Cost Estimates:

Table 3.3.5a Construction Cost Estimates for Alternative 5

Name	Description	Estimated Construction Costs (US \$)
Alternative 5	Pump diversion for Brooker Creek at Ridgemoor Blvd. to Lake Tarpon	\$15,865,690

Model Results:

Flood Peaks - Peak flood elevations at the monitor nodes are tabulated in Tables 3.3.5b for the existing and proposed conditions for the 5-, 25-, and 100- year events. Refer to Appendices A and B for a complete tabulation of stage results. This alternative does not increase water levels upstream of the weirs in the Preserve. This alternative reduces stages in the Tarpon Woods area between 0' and 0.6'. Stages south of Tarpon Woods Boulevard would decrease between 0' and 0.2'.

Flood Duration – The duration of flooding would not be changed in the Preserve should this alternative be implemented. Refer to Figure 3.3.5b. The duration of flooding in the Tarpon Woods area would be reduced from elevation 9.5' to 9.1' at 4 days into the 5-year storm simulation. Refer to Figure 4.2 for the duration results for the 25-year event.

Recommendations:

This alternative would not change stages in the Preserve. It would minimally decrease stages in the Tarpon Woods area. The cost is higher than the cost of purchasing flood affected properties. This alternative would also require an ongoing operation and maintenance schedule to be implemented to maintain the pump station, adding to its future cost. It has no environmental benefit, and the impacts would be medium. An Environmental Resource permit would be required. The permitting and land acquisition difficulty would be medium. The implementation priority is low primarily due to the cost, because it doesn't benefit the Preserve, and there would be difficult permitting and potentially land acquisition issues.

Future design activities could include:

- Updating the model by incorporating the topographic information collected by Florida Department of Environmental Management, District field data collection, and additional surveys;
- Detailed event based analysis of this alternative to confirm feasibility;
- Evaluation and design of outlet systems for developments in Tarpon Woods in order to take advantage of the improvements in the main channel.

Table 3.3.5b Stage Comparison for Alternative 5

Node Name	5yr - 24Hr			25yr - 24Hr			100yr - 24hr			Location
	Exist.	Prop.	Diff.	Exist.	Prop.	Diff.	Exist.	Prop.	Diff.	
	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	
The Preserve										
493320	19.8	19.8	0.0	20.0	20.0	0.0	20.2	20.2	0.0	East of Lora Lane
493450	18.8	18.8	0.0	19.1	19.1	0.0	19.3	19.3	0.0	East of Lora Lane
493480	18.8	18.8	0.0	19.1	19.1	0.0	19.3	19.3	0.0	East of Lora Lane
494150	17.0	17.0	0.0	17.7	17.7	0.0	18.6	18.6	0.0	East of Lora Lane
494205	19.0	19.0	0.0	19.1	19.1	0.0	19.1	19.1	0.0	East of diagonal power line
494240	18.2	18.2	0.0	18.4	18.4	0.0	18.5	18.5	0.0	East of diagonal power line
493525	14.5	14.5	0.0	14.9	14.9	0.0	15.4	15.4	0.0	West of Lora Lane
495332	13.3	13.3	0.0	13.9	13.9	0.0	14.5	14.5	0.0	West of Lora Lane
495348	12.3	12.3	0.0	12.9	12.9	0.0	13.3	13.4	0.0	North of Ridgemoor B.
495304	15.3	15.3	0.0	15.6	15.6	0.0	15.8	15.8	0.0	West of Coventry Village
496100	15.9	15.9	0.0	15.9	15.9	0.0	16.1	16.1	0.0	Northeast of Hawks Landing
496340	10.1	10.1	0.0	11.9	11.9	0.0	12.4	12.4	0.0	East of Warwick Hills
497070	10.0	10.0	0.0	10.1	10.1	0.0	11.7	11.7	0.0	South of Woodridge Lakes
Ridgemoor to Tarpon Woods Boulevard										
497088	10.4	9.9	-0.5	10.9	10.4	-0.5	11.5	11.1	-0.4	Brooker Creek Channel So. Of Ridgemoor Blvd.
497090	10.3	9.9	-0.4	10.8	10.3	-0.5	11.2	10.9	-0.3	Brooker Creek Channel So. Of Ridgemoor Blvd.
497096	8.6	8.0	-0.6	9.2	8.7	-0.5	9.8	9.6	-0.2	West of Tarpon Woods
Nodes around perimeter of Toniwoods										
500050	8.7	8.6	-0.1	9.2	8.9	-0.3	9.8	9.6	-0.2	Tarpon Woods Subdivision
500140	10.3	9.8	-0.4	10.8	10.3	-0.5	11.2	11.0	-0.2	Tarpon Woods Subdivision
500210	10.3	9.8	-0.4	10.8	10.4	-0.4	11.2	11.1	-0.1	Tarpon Woods Subdivision
500300	9.9	9.9	0.0	10.1	10.1	0.0	10.2	10.2	0.0	Tarpon Woods Subdivision
South of Tarpon Woods Boulevard										
497107	4.8	4.7	-0.1	7.3	7.0	-0.3	9.0	8.8	-0.2	South of Tarpon Woods Blvd.
496410	7.9	7.9	0.0	8.5	8.5	0.0	9.3	9.2	-0.1	East Woodlands Pkwy. Area
496600	7.3	7.3	0.0	8.3	8.3	0.0	9.2	9.1	-0.1	South of Woodlands Blvd.

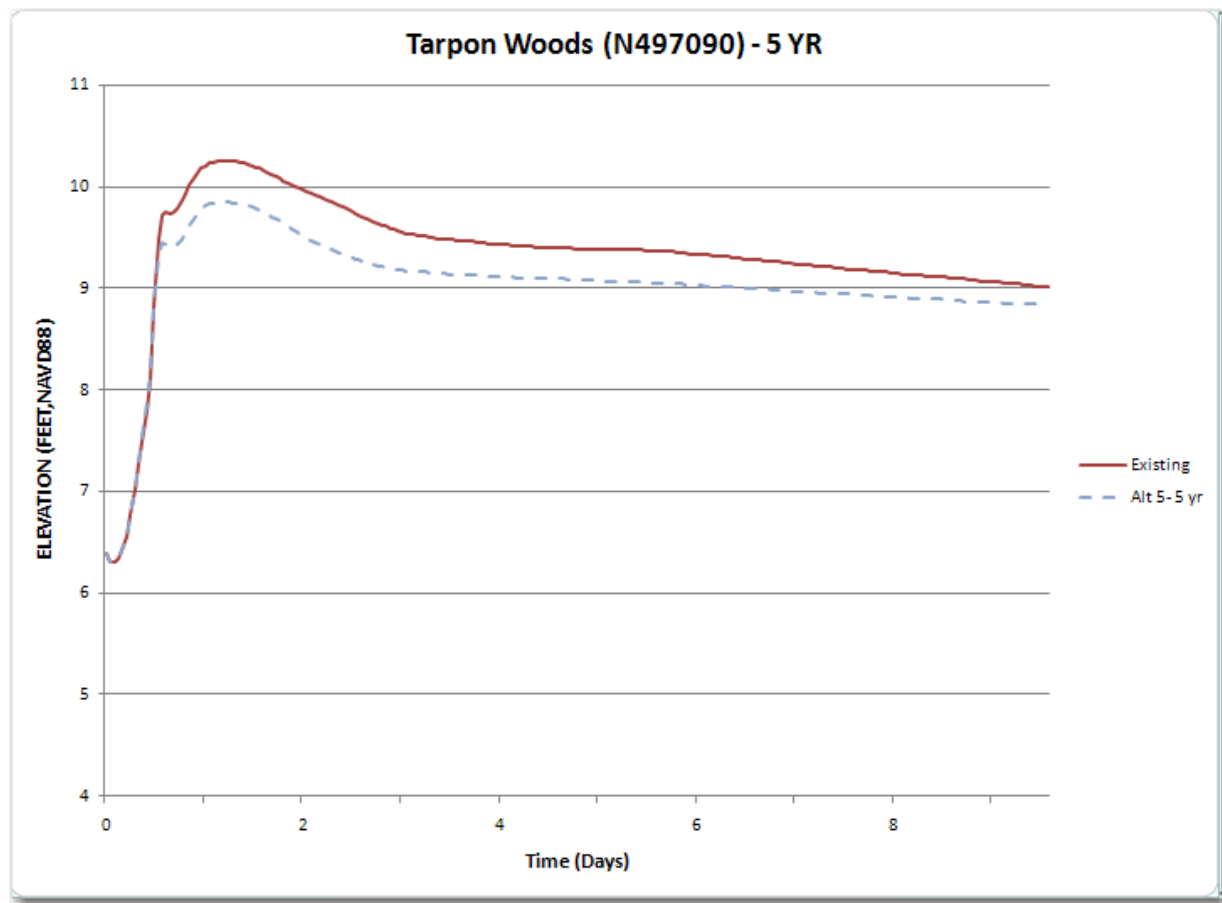


Figure 3.3.5b: Flood duration in Tarpon Woods, Alternative 5

3.3.6 Pumping Station with Force Main / Martin Borrow Pit Expansion – Alternative 6

Alternative 6 is located in STR 07/27/17 and 18/27/17 and includes the Martin Borrow Pit, north of Keystone Road. This alternative would construct a pump system and pipeline to divert water during high flows from Brooker Creek within Hillsborough County directly to an expanded Martin Borrow Pit. The Martin Borrow Pit would provide storage of the high flows that would be released downstream following the storm.

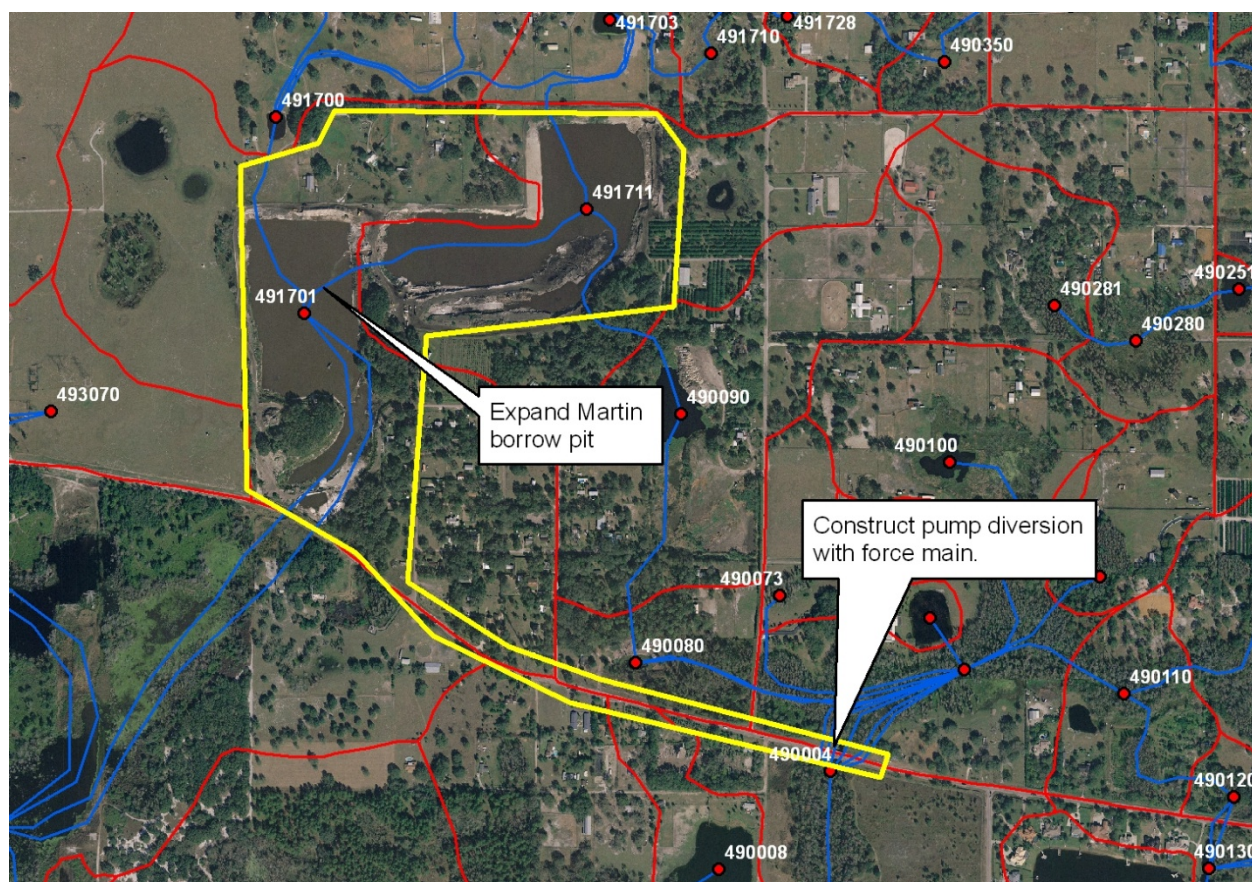


Figure 3.3.6a: Alternative 6 BMPs

Pre vs. Post Hydraulic Analysis

Existing Conditions:

- Bridge at Tarpon Springs Rd.
- Existing Martin Borrow Pit

Proposed Conditions:

- Construct stormwater pump system and pipeline to divert water directly to expanded Martin Borrow Pit
- Expand Martin Borrow Pit to increase storage volume capacity.

Environmental Concerns:

- Medium – Land uses are classified as “Reservoirs”, “Extractive”, “Stream and Lake Swamps (Bottomland), and “Residential – Low Density”.

Land Acquisition Requirements:

- No land acquisitions required for this alternative.

Engineering Complexity and Liability (Considerations for final design):

- Medium complexity.
- Medium liability due to the potential of downstream and upstream impacts.

Cost Estimates:

Table 3.3.6a Construction Cost Estimates Alternative 6

Name	Description	Estimated Construction Costs (US \$)
Alternative 6	Pump Diversion from Brooker Creek / Expand Existing Borrow Pit North of Keystone Rd.	\$30,925,950

Model Results:

Flood Peaks - Peak flood elevations at the monitor nodes are tabulated in Table 3.3.6b for the existing and proposed conditions for the 5- , 25- , and 100- year events. Refer to Appendices A and B for a complete tabulation of stage results. This alternative does not change peak water levels in the Preserve or in Tarpon Woods.

Flood Duration – The duration of flooding would not be changed in the Preserve. This alternative reduces flood duration in Tarpon Woods. Refer to Figure 3.3.6b.

Recommendations:

This alternative would not change peak stages in the Preserve or in the Tarpon Woods area. It would reduce flood duration in the Tarpon Woods area. The cost is higher than the cost of

purchasing flood affected properties. This alternative would also require an ongoing operation and maintenance schedule to be implemented to maintain the pump station, adding to its future cost. It has no environmental benefit, and the impacts would be medium. An Environmental Resource permit would be required. The permitting difficulty would be medium. Land acquisition difficulty would be low. The implementation priority is low primarily due to the cost, and lack of environmental and flood protection benefits.

Table 3.3.6b Stage Comparison for Alternative 6

Node Name	5yr - 24Hr			25yr - 24Hr			100yr - 24hr			Location
	Exist.	Prop.	Diff.	Exist.	Prop.	Diff.	Exist.	Prop.	Diff.	
	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	
The Preserve										
493320	19.8	19.8	0.0	20.0	19.9	-0.1	20.2	20.2	0.0	East of Lora Lane
493450	18.8	18.8	0.0	19.1	19.1	0.0	19.3	19.3	0.0	East of Lora Lane
493480	18.8	18.8	0.0	19.1	19.1	0.0	19.3	19.3	0.0	East of Lora Lane
494150	17.0	17.0	0.0	17.7	17.7	0.0	18.6	18.6	0.0	East of Lora Lane
494205	19.0	19.0	0.0	19.1	19.1	0.0	19.1	19.1	0.0	East of diagonal power line
494240	18.2	18.2	0.0	18.4	18.4	0.0	18.5	18.5	0.0	East of diagonal power line
493525	14.5	14.5	0.0	14.9	14.9	0.0	15.4	15.4	0.0	West of Lora Lane
495332	13.3	13.3	0.0	13.9	13.9	0.0	14.5	14.5	0.0	West of Lora Lane
495348	12.3	12.3	0.0	12.9	12.9	0.0	13.3	13.3	0.0	North of Ridgemoor B.
495304	15.3	15.3	0.0	15.6	15.6	0.0	15.8	15.8	0.0	West of Coventry Village
496100	15.9	15.9	0.0	15.9	15.9	0.0	16.1	16.1	0.0	Northeast of Hawks Landing
496340	10.1	10.1	0.0	11.9	11.9	0.0	12.4	12.4	0.0	East of Warwick Hills
497070	10.0	10.0	0.0	10.1	10.1	0.0	11.7	11.7	0.0	South of Woodridge Lakes
Ridgemoor to Tarpon Woods Boulevard										
497088	10.4	10.4	0.0	10.9	10.9	0.0	11.5	11.5	0.0	Brooker Creek Channel So. Of Ridgemoor Blvd.
497090	10.3	10.3	0.0	10.8	10.8	0.0	11.2	11.2	0.0	Brooker Creek Channel So. Of Ridgemoor Blvd.
497096	8.6	8.6	0.0	9.2	9.2	0.0	9.8	9.8	0.0	West of Tarpon Woods
Nodes around perimeter of Toniwoods										
500050	8.7	8.7	0.0	9.2	9.2	0.0	9.8	9.8	0.0	Tarpon Woods Subdivision
500140	10.3	10.2	0.0	10.8	10.8	0.0	11.2	11.2	0.0	Tarpon Woods Subdivision
500210	10.3	10.2	0.0	10.8	10.8	0.0	11.2	11.2	0.0	Tarpon Woods Subdivision
500300	9.9	9.9	0.0	10.1	10.1	0.0	10.2	10.2	0.0	Tarpon Woods Subdivision
South of Tarpon Woods Boulevard										
497107	4.8	4.8	0.0	7.3	7.3	0.0	9.0	9.0	0.0	South of Tarpon Woods Blvd.
496410	7.9	7.9	0.0	8.5	8.5	0.0	9.3	9.3	0.0	East Woodlands Pkwy. Area
496600	7.3	7.3	0.0	8.3	8.3	0.0	9.2	9.2	0.0	South of Woodlands Blvd.

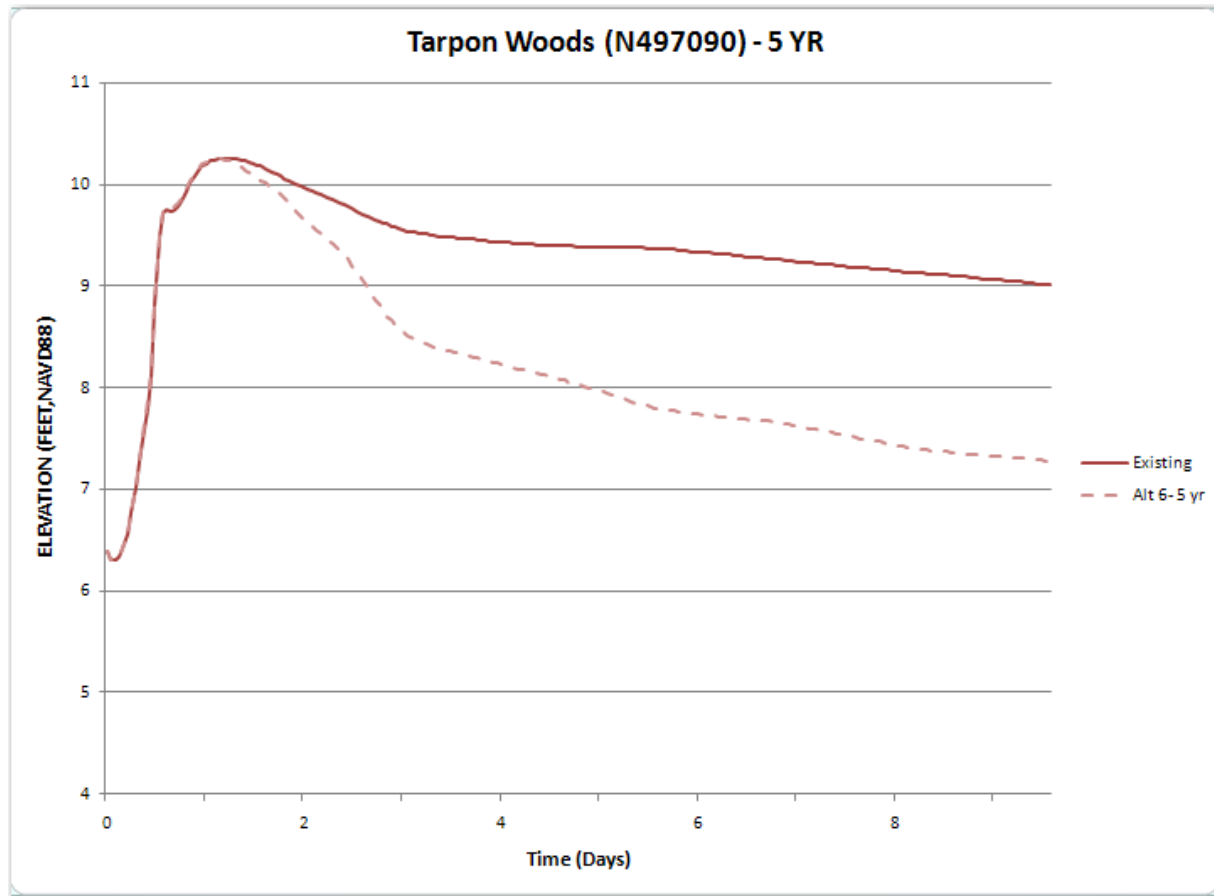


Figure 3.3.6b: Flood duration in Tarpon Woods, Alternative 6

3.3.7 East Lake Outfall – Alternative 7

Alternative 7 is located in STR 27/27/16 and 28/17/16 north of Ridgemoor Boulevard. This alternative would include constructing a ditch / berm to divert a portion of the Brooker Creek channel flow to a 60-inch pipe outfall across East Lake Road. From East Lake Road a channel would be constructed to existing golf course ponds to outfall to Lake Tarpon.

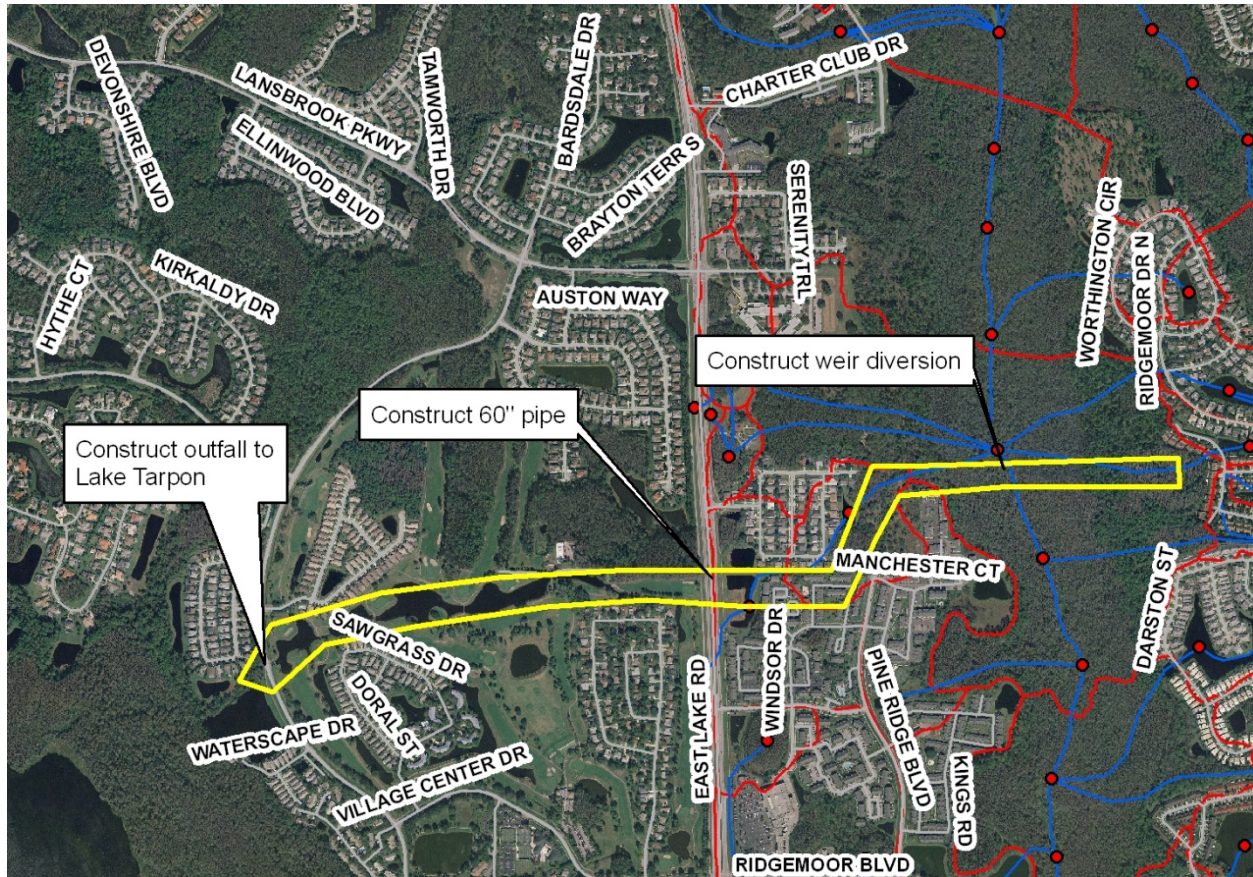


Figure 3.3.7a: Alternative 7 BMPs

Pre vs. Post Hydraulic Analysis

Existing Conditions:

- Existing Brooker Creek Channel.
- Residential area with golf course.
- Culvert across East Lake Rd.

Proposed Conditions:

- Construct ditch / berm to divert portion of Brooker Creek channel flow to a 60-inch pipe outfall across East Lake Rd.
- Construct channel across golf course ponds to outfall to Lake Tarpon.

Environmental Concerns:

- Medium – The site is currently occupied by “Stream and Lake Swamps (Bottomland)”, “Shrub and Brushland”, “Residential High-Density”, “Recreational”, “Reservoirs,” and “Wetland Forested Mixed”. Due to their locations, the wetlands could be excavated and may require mitigation.

Land Acquisition Requirements:

- Land acquisitions/ Easements required for this alternative.

Engineering Complexity and Liability (Considerations for final design):

- Medium complexity.
- Medium liability due to the potential of downstream impacts.

Cost Estimates:

Table 3.3.7a Construction Cost Estimates Alternative 7

Name	Description	Estimated Construction Costs (US \$)
Alternative 7	Gravity Flow Diversion at East Lake Road to Lake Tarpon	\$5,329,270

Model Results:

Flood Peaks - Peak flood elevations at the monitor nodes are tabulated in Table 3.3.7b for the existing and proposed conditions for the 5- , 25- , and 100- year events. Refer to Appendices A and B for a complete tabulation of stage results. This alternative does not change existing water levels in the Preserve. This alternative reduces stages in the Tarpon Woods area between 0’ and 0.7’, depending on the event and location. Stages south of Tarpon Woods Boulevard would decrease by up to 0.3’ for the 100-year event.

Flood Duration – The duration of flooding in the Preserve would not be changed should this alternative be implemented. The duration of flooding in the Tarpon Woods area would be reduced from elevation 9.5’ to 5.7’ at 4 days into the 5-year storm simulation. Refer to Figure 3.3.7b. Refer to Figure 4.2 for the duration results for the 25-year event.

Recommendations:

This alternative would not change stages in the Preserve. It would decrease stages and duration of flooding in the Tarpon Woods area. The cost is less than the cost of purchasing flood affected properties. It has no environmental benefit, and the impacts would be medium. An Environmental Resource Permit would be required. Permitting and land acquisition difficulty would be medium. The implementation priority is medium primarily because it doesn’t benefit the Preserve.

Downstream in the Tarpon Woods area, faster drawdown in the main channel would allow water levels in the streets and yards to recede sooner. This is contingent on adequate capacity of the storm water system between the subdivision and the Brooker Creek channel.

Future design activities could include:

- Updating the model by incorporating the topographic information collected by Florida Department of Environmental Management, District field data collection, and additional surveys;
- Detailed event based analysis of this alternative to confirm feasibility;
- Evaluation and design of outlet systems for developments in Tarpon Woods in order to take advantage of the improvements in the main channel.

Table 3.3.7b Stage Comparison for Alternative 7

Node Name	5yr - 24Hr			25yr - 24Hr			100yr - 24hr			Location
	Exist.	Prop.	Diff.	Exist.	Prop.	Diff.	Exist.	Prop.	Diff.	
	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	
The Preserve										
493320	19.8	19.8	0.0	20.0	20.0	0.0	20.2	20.2	0.0	East of Lora Lane
493450	18.8	18.8	0.0	19.1	19.1	0.0	19.3	19.3	0.0	East of Lora Lane
493480	18.8	18.8	0.0	19.1	19.1	0.0	19.3	19.3	0.0	East of Lora Lane
494150	17.0	17.0	0.0	17.7	17.7	0.0	18.6	18.6	0.0	East of Lora Lane
494205	19.0	19.0	0.0	19.1	19.1	0.0	19.1	19.1	0.0	East of diagonal power line
494240	18.2	18.2	0.0	18.4	18.4	0.0	18.5	18.5	0.0	East of diagonal power line
493525	14.5	14.5	0.0	14.9	14.9	0.0	15.4	15.4	0.0	West of Lora Lane
495332	13.3	13.3	0.0	13.9	13.9	0.0	14.5	14.5	0.0	West of Lora Lane
495348	12.3	11.5	-0.8	12.9	12.0	-0.9	13.3	12.5	-0.8	North of Ridgemoor B.
495304	15.3	15.3	0.0	15.6	15.6	0.0	15.8	15.8	0.0	West of Coventry Village
496100	15.9	15.9	0.0	15.9	15.9	0.0	16.1	16.1	0.0	Northeast of Hawks Landing
496340	10.1	10.1	0.0	11.9	11.9	0.0	12.4	12.4	0.0	East of Warwick Hills
497070	10.0	10.0	0.0	10.1	10.1	0.0	11.7	11.7	0.0	South of Woodridge Lakes
Ridgemoor to Tarpon Woods Boulevard										
497088	10.4	9.8	-0.6	10.9	10.4	-0.5	11.5	10.8	-0.6	Brooker Creek Channel So. Of Ridgemoor Blvd.
497090	10.3	9.7	-0.5	10.8	10.3	-0.5	11.2	10.8	-0.4	Brooker Creek Channel So. Of Ridgemoor Blvd.
497096	8.6	7.9	-0.7	9.2	8.7	-0.5	9.8	9.3	-0.4	West of Tarpon Woods
Nodes around perimeter of Toniwoods										
500050	8.7	8.6	-0.1	9.2	8.9	-0.3	9.8	9.4	-0.4	Tarpon Woods Subdivision
500140	10.3	9.6	-0.7	10.8	10.3	-0.5	11.2	10.9	-0.3	Tarpon Woods Subdivision
500210	10.3	9.6	-0.7	10.8	10.4	-0.4	11.2	11.2	-0.1	Tarpon Woods Subdivision
500300	9.9	9.9	0.0	10.1	10.1	0.0	10.2	10.2	0.0	Tarpon Woods Subdivision
South of Tarpon Woods Boulevard										
497107	4.8	4.7	0.0	7.3	7.1	-0.2	9.0	8.8	-0.3	South of Tarpon Woods Blvd.
496410	7.9	7.9	0.0	8.5	8.5	0.0	9.3	9.2	-0.1	East Woodlands Pkwy. Area
496600	7.3	7.3	0.0	8.3	8.3	0.0	9.2	9.1	-0.1	South of Woodlands Blvd.

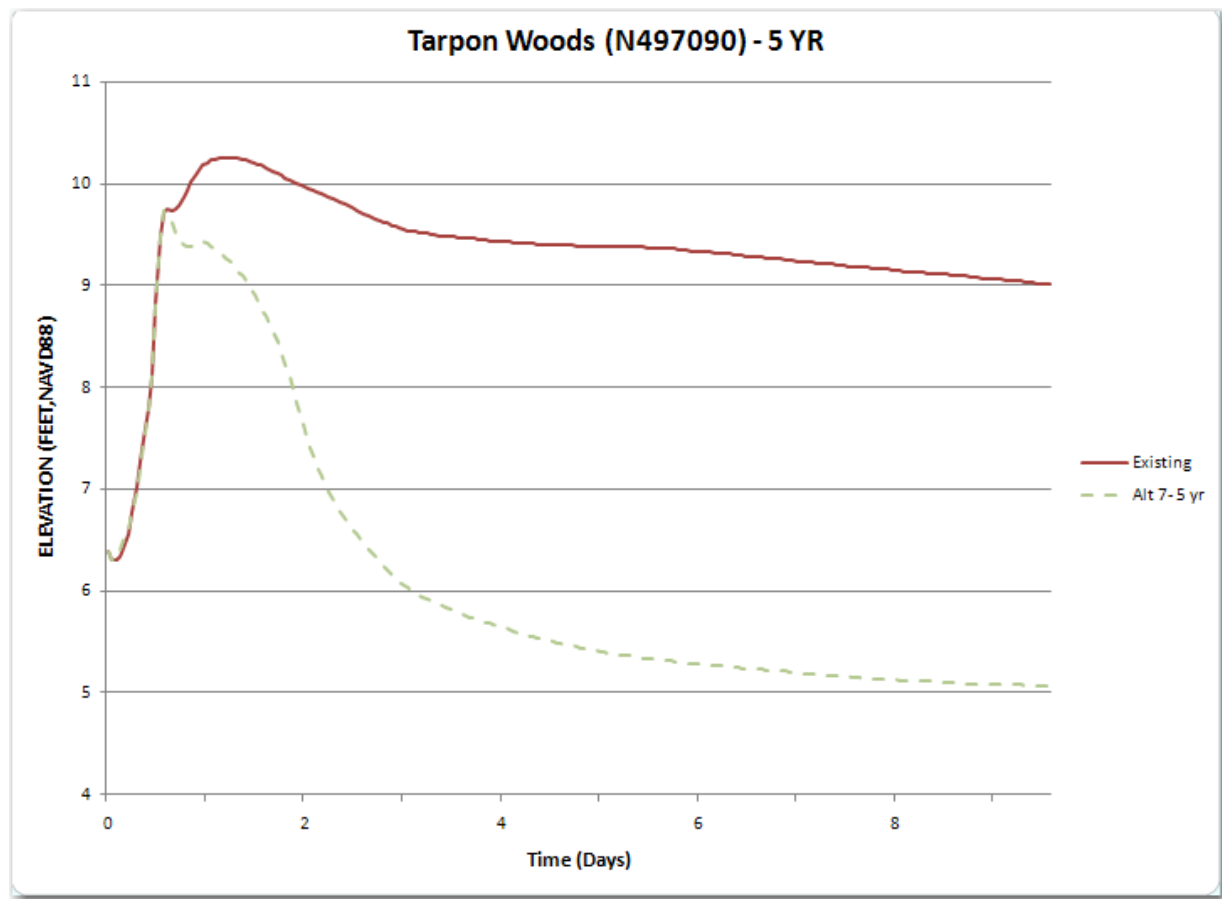


Figure 3.3.7b: Flood duration in Tarpon Woods, Alternative 7

3.3.8 Brooker Creek Channel Improvements – Alternative 8

Alternative 8 is located in STR 34/27/16 and includes improving the Brooker Creek Channel from Ridgemoor Boulevard to Tarpon Woods Boulevard. This alternative was previously developed by Tampa Bay Engineering (TBE) for Pinellas County Public Works. It consists of improving 3,400 feet of the Brooker Creek channel by increasing the width of the channel to 50 feet to improve conveyance. A representative cross section showing existing and proposed channel cross section is given in Appendix E. The stormwater management system internal to the Tarpon Woods development was not included in this BMP evaluation.

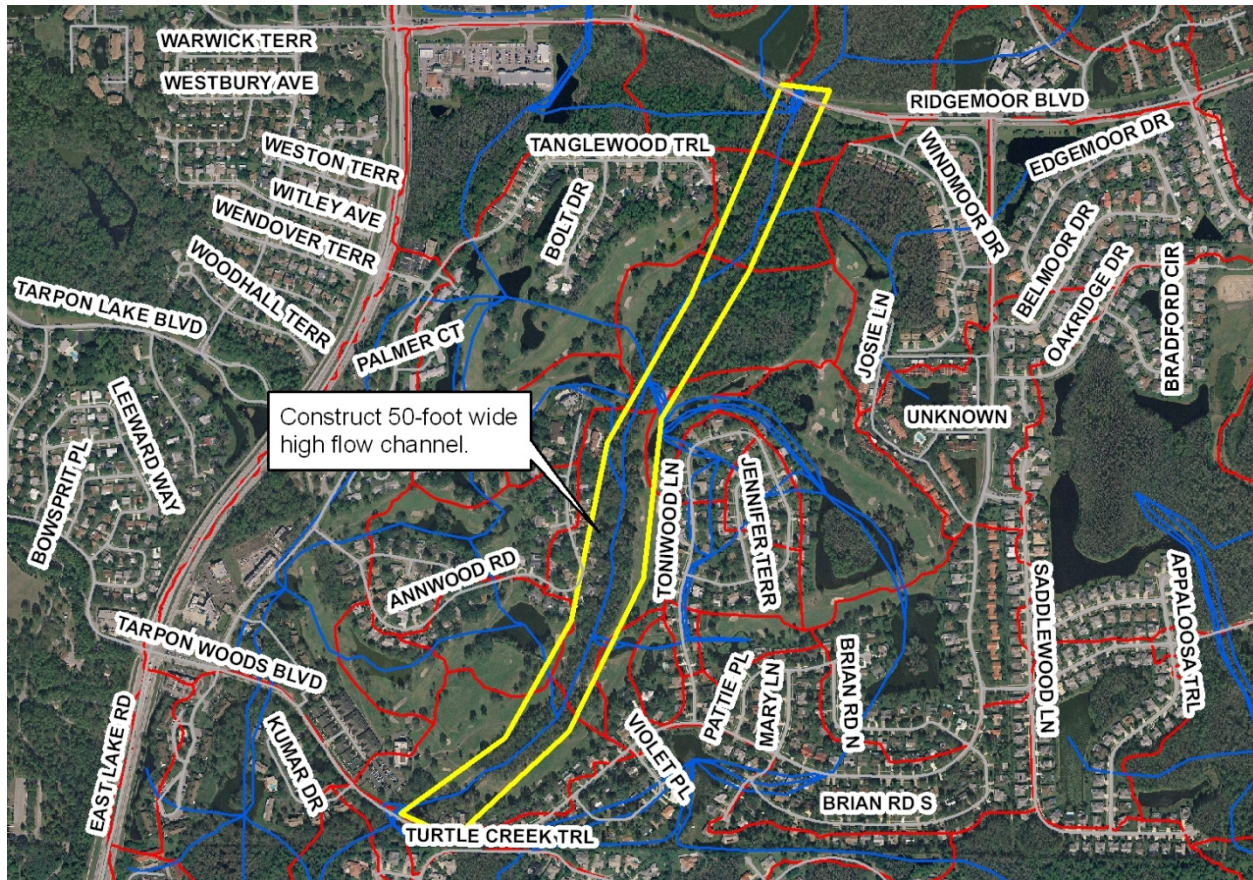


Figure 3.3.8a: Alternative 8 BMPs

Pre vs. Post Hydraulic Analysis

Existing Conditions:

- Existing Brooker Creek Channel
- Flood complaints reported for this area near Tarpon Woods Blvd.
- High density residential areas

Proposed Conditions:

- 3,400 foot long, 50 foot wide expanded Brooker Creek main channel

Environmental Concerns:

- Medium – The site is currently occupied by “Stream and Lake Swamps (Bottomland), and “Pine Flatwoods”. The wetlands along the Brooker Creek channel would be excavated by implementing this BMP, and would require mitigation.

Land Acquisition Requirements:

- Land acquisition required for channel expansion through golf course.

Cost Estimates:

Table 3.3.8a Construction Cost Estimates for Alternative 8

Name	Description	Estimated Construction Costs (US \$)
Alternative 8	Brooker Creek High Flow Channel Through Golf Course	\$7,096,560

Model Results:

Flood Peaks - Peak flood elevations at the monitor nodes are tabulated in Table 3.3.8b for the existing and proposed conditions for the 5- , 25- , and 100- year events. Refer to Appendices A and B for a complete tabulation of stage results. This alternative does not increase water levels upstream of the weirs in the Preserve. This alternative reduces stages in the Tarpon Woods area between 0.4’ and 2.5’ depending on the event and location. Stages south of Tarpon Woods Boulevard would not change.

Flood Duration – The duration of flooding in the Preserve would not be changed should this alternative be implemented. The duration of flooding in the Tarpon Woods area is demonstrated by the reduced elevation from 9.5’ to 6.2’ at 4 days into the 5-year storm event simulation. Refer to Figure 3.3.8b for the 5-year results, and to Figure 4.2 for the 25-year results.

Recommendations:

This alternative would not change flood stages or duration in the Preserve. It will decrease stages and duration in the Tarpon Woods area. The cost is less than the cost of purchasing flood affected properties. It has no environmental benefit, and the impacts would be high. An Environmental Resource Permit would be required. Permitting and land acquisition difficulty would be high. The implementation priority is low primarily due to the environmental impact, and difficult permitting and land acquisition issues.

Downstream in the Tarpon Woods area, faster drawdown in the main channel would allow water levels in the streets and yards to recede sooner. This is contingent on adequate capacity of the storm water system between the subdivision and the Brooker Creek channel.

Future design activities could include:

- Updating the model by incorporating the topographic information collected by Florida Department of Environmental Management, District field data collection, and additional surveys;
- Detailed event based analysis of this alternative to confirm feasibility;
- Evaluation and design of outlet systems for developments in Tarpon Woods in order to take advantage of the improvements in the main channel.

Table 3.3.8b Stage Comparison for Alternative 8

Node Name	5yr - 24Hr			25yr - 24Hr			100yr - 24hr			Location
	Exist.	Prop.	Diff.	Exist.	Prop.	Diff.	Exist.	Prop.	Diff.	
	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	
The Preserve										
493320	19.8	19.8	0.0	20.0	20.0	0.1	20.2	20.2	0.0	East of Lora Lane
493450	18.8	18.8	0.0	19.1	19.1	0.0	19.3	19.3	0.0	East of Lora Lane
493480	18.8	18.8	0.0	19.1	19.1	0.0	19.3	19.3	0.0	East of Lora Lane
494150	17.0	17.0	0.0	17.7	17.7	0.0	18.6	18.6	0.0	East of Lora Lane
494205	19.0	19.0	0.0	19.1	19.1	0.0	19.1	19.1	0.0	East of diagonal power line
494240	18.2	18.2	0.0	18.4	18.4	0.0	18.5	18.5	0.0	East of diagonal power line
493525	14.5	14.5	0.0	14.9	14.9	0.0	15.4	15.4	0.0	West of Lora Lane
495332	13.3	13.3	0.0	13.9	13.9	0.0	14.5	14.5	0.0	West of Lora Lane
495348	12.3	12.3	-0.1	12.9	12.9	0.0	13.3	13.4	0.0	North of Ridgemoor B.
495304	15.3	15.3	0.0	15.6	15.6	0.0	15.8	15.8	0.0	West of Coventry Village
496100	15.9	15.9	0.0	15.9	15.9	0.0	16.1	16.1	0.0	Northeast of Hawks Landing
496340	10.1	10.1	0.0	11.9	11.9	0.0	12.4	12.4	0.0	East of Warwick Hills
497070	10.0	10.0	0.0	10.1	10.1	0.0	11.7	11.7	0.0	South of Woodridge Lakes
Ridgemoor to Tarpon Woods Boulevard										
497088	10.4	8.8	-1.6	10.9	10.2	-0.7	11.5	11.5	0.1	Brooker Creek Channel So. Of Ridgemoor Blvd.
497090	10.3	7.8	-2.5	10.8	9.2	-1.6	11.2	10.8	-0.4	Brooker Creek Channel So. Of Ridgemoor Blvd.
497096	8.6	6.6	-2.1	9.2	8.3	-0.9	9.8	10.1	0.3	West of Tarpon Woods
Nodes around perimeter of Toniwoods										
500050	8.7	8.6	-0.1	9.2	8.9	-0.3	9.8	10.1	0.3	Tarpon Woods Subdivision
500140	10.3	8.9	-1.4	10.8	9.8	-1.0	11.2	10.8	-0.4	Tarpon Woods Subdivision
500210	10.3	9.6	-0.7	10.8	10.4	-0.4	11.2	11.1	-0.1	Tarpon Woods Subdivision
500300	9.9	9.9	0.0	10.1	10.1	0.0	10.2	10.2	0.0	Tarpon Woods Subdivision
South of Tarpon Woods Boulevard										
497107	4.8	4.9	0.1	7.3	7.4	0.1	9.0	9.1	0.0	South of Tarpon Woods Blvd.
496410	7.9	7.9	0.0	8.5	8.5	0.0	9.3	9.3	0.0	East Woodlands Pkwy. Area
496600	7.3	7.3	0.0	8.3	8.3	0.0	9.2	9.3	0.0	South of Woodlands Blvd.

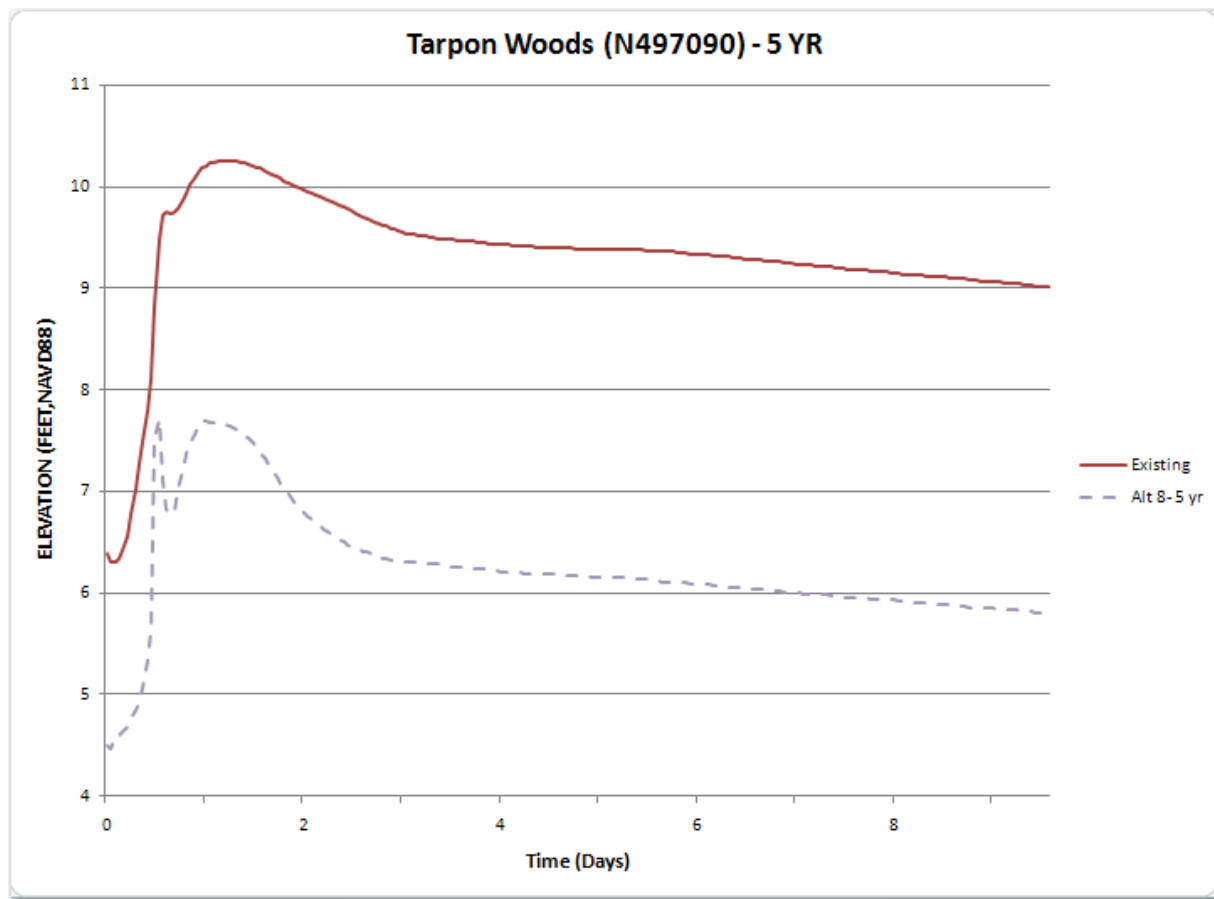


Figure 3.3.8b: Flood duration in Tarpon Woods, Alternative 8

3.3.9 Low Water Crossings – Alternative 9

Alternative 9 is located along the power line easement/ dirt road at the east side of the Preserve. Currently the existing dirt access road along the power line restricts flow from the east to west sides of the road. This alternative would construct low water crossings / weirs to restore east-west sheet flow at several points in the power line easement dirt road. In addition, the ditches on the east side of the power line access road within the Preserve would be filled to the adjacent grade or blocked with ditch blocks.

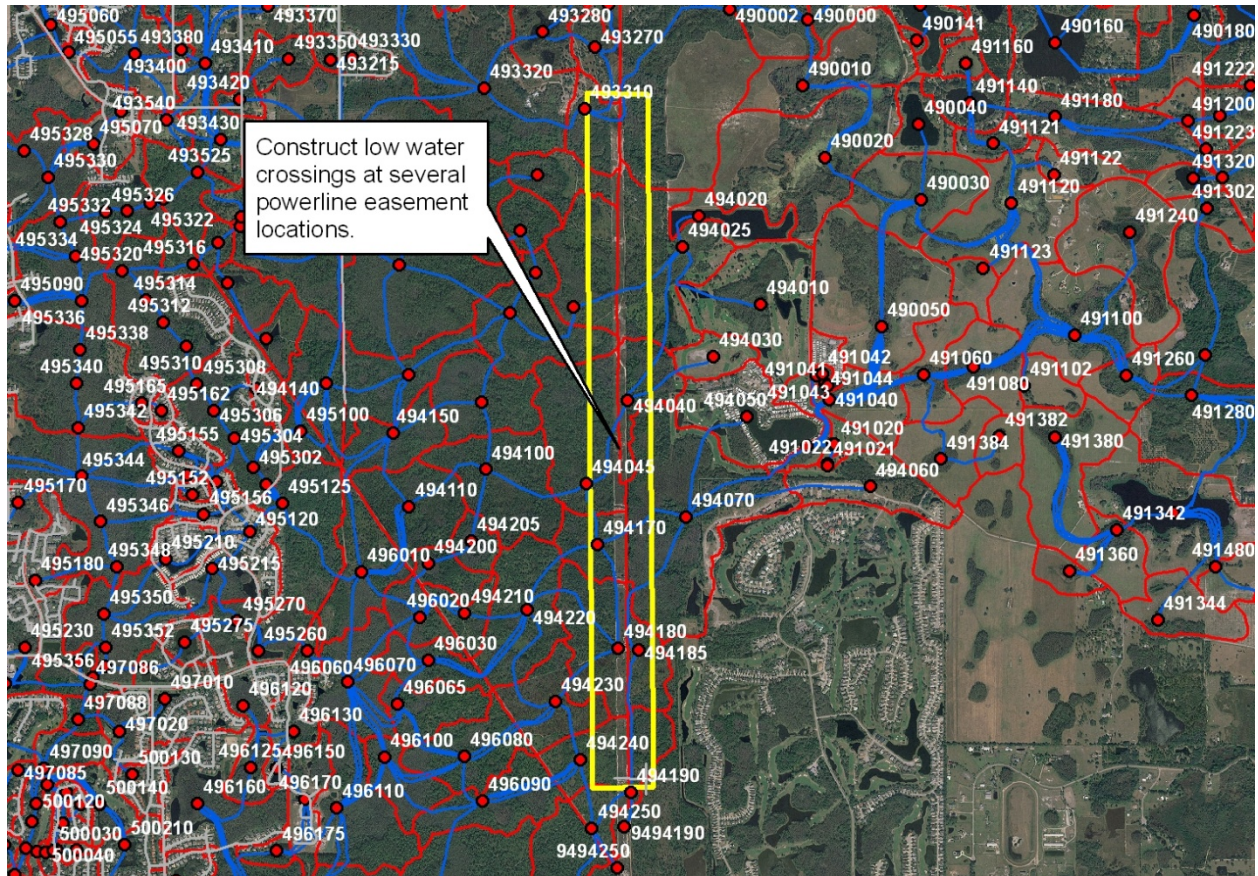


Figure 3.3.9a: Alternative 9 BMPs

Pre vs. Post Hydraulic Analysis

Existing Condition:

- Powerline easement owned by Progress Energy Corporation

Proposed Conditions:

- Construct low water crossings / weirs to restore east-west sheet flow at several points in the power line easement dirt road.

- The ditches on the east side of the power line access road within the Preserve are to be filled to the adjacent grade or blocked with ditch blocks.

Environmental Concerns:

- Low – The site is currently occupied by “Utilities”, “Hardwood Conifer Mixed”, “Wetland Forested Mixed”, “Cypress”, and “Pine Flatwoods”

Land Acquisition Requirements:

- Land acquisitions required for this alternative include an agreement with Progress Energy to allow completion of the work.

Cost Estimates:

Table 3.3.9a Construction Cost Estimates for Alternative 9

Name	Description	Estimated Construction Costs (US \$)
Alternative 9	Low water crossings at the north–south power line road along the east boundary of the Preserve	\$500,000

Model Results:

This alternative was not modeled. It would have to be modeled during the detailed design phase in the future to verify that the proposed work would not impact upstream and downstream wetlands.

Recommendations:

This alternative would not significantly change stages in the Preserve, but it would restore historical flow paths along the east boundary of the Preserve. It would not decrease stages or duration of flooding in the Tarpon Woods area. The cost is less than the cost of purchasing flood affected properties. It has an environmental benefit, and the impacts would be low, consisting mostly of temporary impacts during construction. An Environmental Resource Permit would be required. Permitting and land acquisition difficulty would be low. The implementation priority is medium primarily because it does not benefit the Tarpon Woods area.

Future design activities could include:

- Updating the model by incorporating the topographic information collected by Florida Department of Environmental Management, District field data collection, and additional surveys;
- Detailed event based analysis of this alternative to determine feasibility;
- Design of alternative weir controls to allow the County to manage water levels in the Preserve during low flows;

- Detailed evaluation of the impact of restoring flow paths and filling ditches in this area on the east border of the Preserve; and
- Model simulations using long term historical rainfall data to test these more detailed alternatives.

3.3.10 Property Acquisition – Alternative 10

Alternative 10 is located primarily in the Tarpon Woods Subdivision area. This alternative includes the purchase and removal of approximately 22 affected properties within the Brooker Creek Watershed which experience flooding or have limited access during flood conditions due to flooded roads.

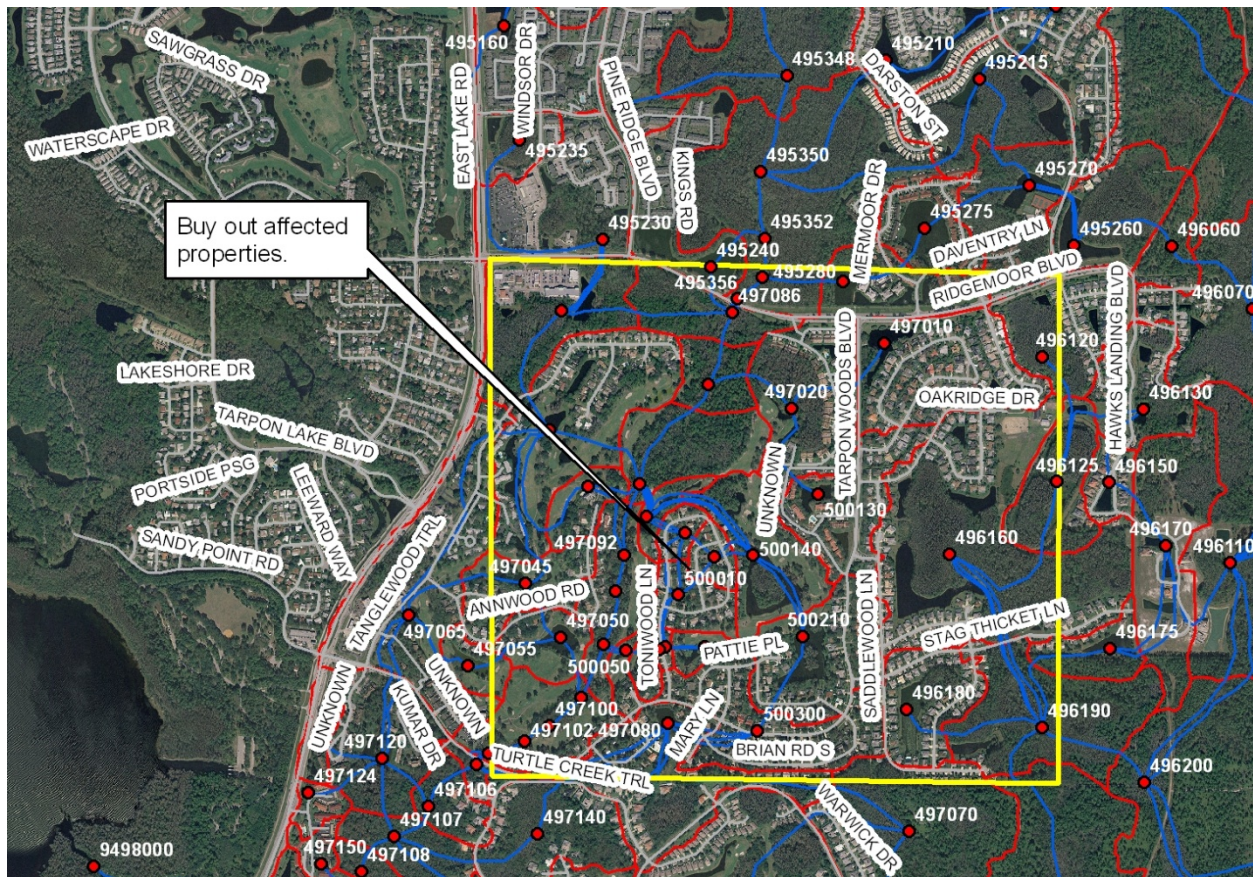


Figure 3.3.10a: Alternative 10 BMPs

Pre vs. Post Hydraulic Analysis

Existing Conditions:

- Several affected properties throughout the Brooker Creek Watershed which experience flooding or have limited access during flood conditions due to flooded roads.

Proposed Conditions:

- Purchase affected properties.

Environmental Concerns:

- Low

Land Acquisition Requirements:

- Land acquisitions of affected properties required for this alternative.

Cost Estimates:

Table 3.3.10a Cost Estimates for Alternative 10

Name	Description	Estimated Construction Costs (US \$)
Alternative 10	Purchase impacted parcels.	\$10,000,000

Model Results:

This alternative was not modeled.

Recommendations:

This alternative would not benefit the Preserve. It has a flood protection benefit to Tarpon Woods by removing the flood affected properties. The cost was used as the bench mark for the other alternatives. It has no environmental benefit or impacts. An Environmental Resource Permit would not be required. The land acquisition difficulty would be high. The implementation priority is medium due to the land acquisition issue, and because it does not benefit the Preserve.

3.3.11 Channel Maintenance – Alternative 11

Alternative 11 is proposed for the existing Brooker Creek Channel limits within the developed areas of the watershed. This would include those areas already maintained in association with the Lora Lane and Ranch Road areas within the Preserve. This alternative includes regular maintenance of the Brooker Creek channel within developed areas to clear debris, snags and sediment from the channel that may restrict flows.

Pre vs. Post Hydraulic Analysis

Existing Conditions:

- Some reaches of Brooker Creek are in need of maintenance because of the lack of easements.

Proposed Conditions:

- Provide debris and sediment removal in channel to improve conveyance.

Environmental Concerns:

- Low – The site is currently occupied by “Stream and Lake Swamps”

Land Acquisition Requirements:

- Easements may be required for this alternative.

Cost Estimates:

Table 3.3.11a Cost Estimates for Alternative 11

Name	Description	Estimated Construction Costs (US \$)
Alternative 11	Channel Maintenance	\$500,000

Model Results:

This alternative was not modeled.

Recommendations:

This alternative would not change stages or duration of flooding in the Preserve during the 5-year, 25- year and 100-year events. Performing maintenance would likely be beneficial for more frequent “afternoon showers” events. The cost is less than the cost of purchasing flood affected properties. It has no environmental benefit, and the impacts would be low. An Environmental Resource Permit may not be required for this alternative. Land acquisition difficulty is high because the County does not have an easement. The implementation priority is medium because of minimal flood benefits for less frequent rainfall events, and lack of benefit to the Preserve.

3.3.12 Alternative C1: Weir Construction/ Culvert Addition / East Lake Outfall

Alternative C1 is a combination of the BMPs in Alternatives 2 and 7. It includes adding culverts at existing crossings in the Preserve and constructing weirs upstream of the crossings. It also includes the diversion of peak storm water flows from Brooker Creek to Lake Tarpon at a location near Ridgemoor Boulevard. The location of this alternative is shown below. For more information about existing and proposed conditions for Alternatives 2 and 7 refer to Sections 3.3.2 and 3.3.7, respectively.

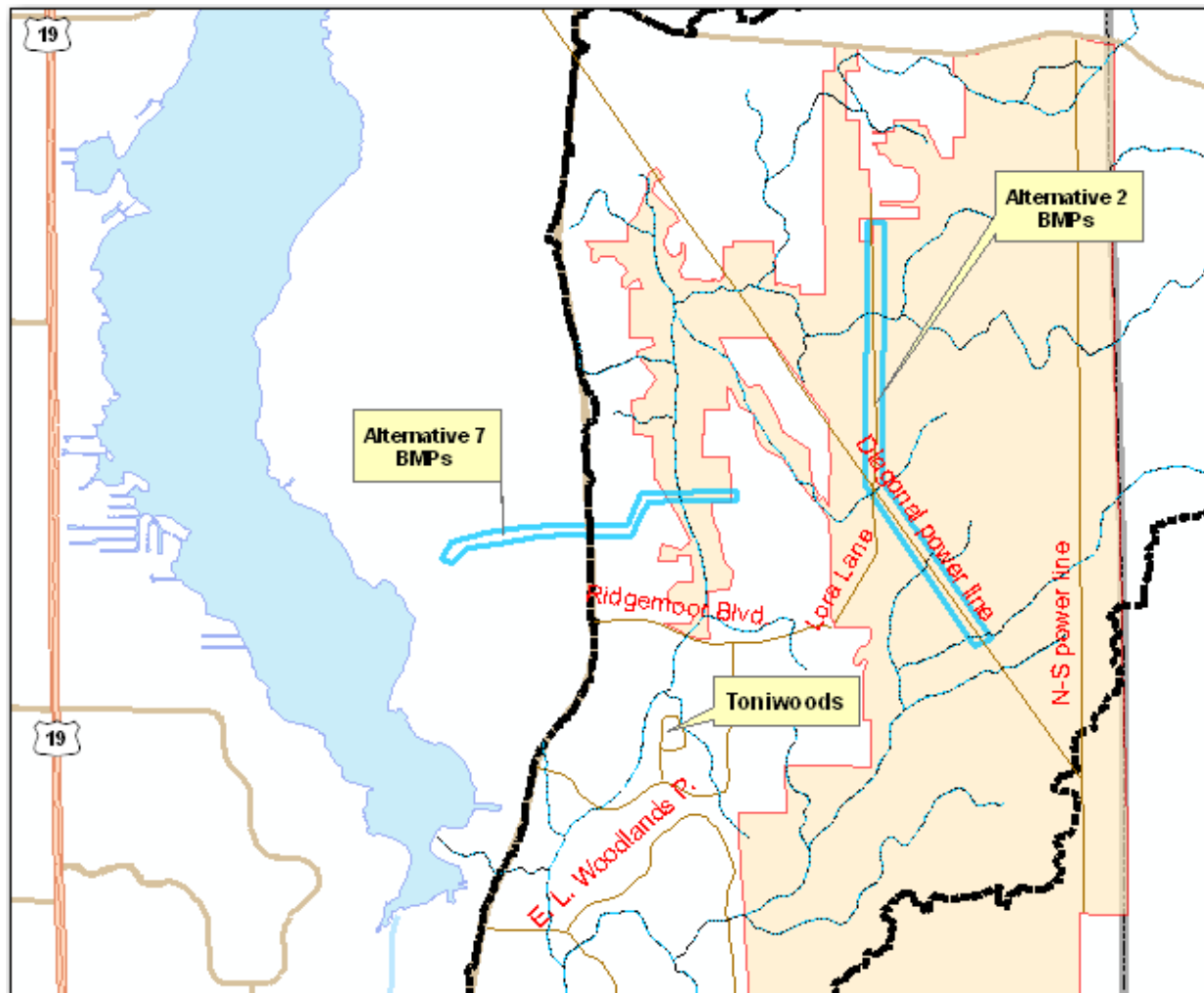


Figure 3.3.12a: Alternative C1 BMPs

Cost Estimates:

Table 3.3.12a Construction Cost Estimates for Alternative C1

Name	Description	Estimated Construction Costs (US \$)
Alternative 2	Construct weir structures at Lora Lane and various power line crossings	\$ 176,080
Alternative 7	Gravity flow diversion at East Lake Rd. to Lake Tarpon	\$5,329,270
Alternative C1 Total:		\$5,505,350

Model Results:

Flood Peaks - Peak flood elevations at the monitor nodes are tabulated in Table 3.3.12b for the existing and proposed conditions for the 5-, 25-, and 100- year events. Refer to Appendices A and B for complete results. This alternative increases water levels upstream of the proposed weirs in the Preserve between 0 and 0.2' during passage of the three events. This alternative reduces flood stages in the Tarpon Woods area between 0.4' and 1.2' during passage of the 3 events.

Installation of weirs has upstream and downstream impacts on water levels during passage of these events. The increase in water level upstream of the weirs diverts the water south along the power line road, increasing the flow rates from other crossings, which results in road overtopping. This causes an increase in water elevations of between 0 and 0.2' downstream of Tarpon Woods Boulevard. Downstream of the proposed weirs, peak flood stages at nodes 493525 and 495332 are lower in the wetlands between Lora Lane and Ridgemoor Boulevard by a maximum of 0.6' for the three events, as more water is retained by the weirs during passage of the flood. Immediately upstream of Ridgemoor Boulevard (Node 495348) the stage is reduced by a maximum of 1.0' partially due to the influence of the diversion.

Flood Duration – The duration of flooding would be increased in the Preserve. Refer to Figure 3.3.12b. The drawdown rate is slowed from approximately one day to more than ten days. The duration of flooding in the Tarpon Woods area would be reduced if this alternative is implemented. The stage would be reduced from 9.5' to 5.7' at day four of the 5-year event model simulation. Refer to Figure 3.3.12c for the 5-year comparison, and to Figure 4.2, in Section 4, for a comparison of water levels during the 25-year event.

Recommendations:

This alternative would increase stages and duration of flooding in the Preserve, and it would decrease stages and duration of flooding in the Tarpon Woods area. The cost is less than the cost of purchasing flood affected properties. It has an environmental benefit, and the impacts would be low and mostly temporary during construction. An Environmental Resource Permit would be required. The difficulty of permitting and land acquisition is medium. The implementation priority is medium. Although it benefits the Preserve and the Tarpon Woods area, the difficulty of permitting and land acquisition for the Alternative 7 part is medium.

Because the implementation of this alternative was found to reduce the rate of drawdown of the water levels in the Preserve during this event based analysis, it is reasonable to assume the same would occur during low flow periods. This means water levels in surrounding wetlands could be managed more effectively. The filling of ditches associated with this alternative could be performed as a separate project to provide restoration benefit to the Preserve.

Downstream in the Tarpon Woods area, faster drawdown in the main channel would allow water levels in the streets and yards to recede sooner. This is contingent on adequate capacity of the storm water system between the subdivision and the Brooker Creek channel.

There is an advantage in combining Alternatives 2 and 7 over implementing only Alternative 2 or Alternative 7. Flood stages in Tarpon Woods would be lower by a maximum of 0.3' for the 5- and 25-year events (see Table 3.3.12c). The reduction is more for the 100- year event (greater than 1.0').

Future design activities could include:

- Updating the model by incorporating the topographic information collected by Florida Department of Environmental Management, District field data collection, and additional surveys;
- Design of alternative weir controls to allow the County to manage water levels in the Preserve during low flows;
- Detailed evaluation of the impact of filling ditches in the Preserve;
- Model simulations using long term historical rainfall data to test these more detailed alternatives; and
- Evaluation and design of outlet systems for developments in Tarpon Woods in order to take advantage of the improvements in the main channel.

Table 3.3.12b Stage Comparison for Alternative C1

Node Name	5yr - 24Hr			25yr - 24Hr			100yr - 24hr			Location
	Exist.	Prop.	Diff.	Exist.	Prop.	Diff.	Exist.	Prop.	Diff.	
	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	
The Preserve										
493320	19.8	19.8	0.0	20.0	20.0	0.1	20.2	20.2	0.1	East of Lora Lane
493450	18.8	19.0	0.1	19.1	19.2	0.1	19.3	19.4	0.1	East of Lora Lane
493480	18.8	19.0	0.2	19.1	19.2	0.1	19.3	19.4	0.1	East of Lora Lane
494150	17.0	17.2	0.2	17.7	18.2	0.5	18.6	18.8	0.2	East of Lora Lane
494205	19.0	19.0	0.0	19.1	19.1	0.0	19.1	19.1	0.0	East of diagonal power line
494240	18.2	18.2	0.0	18.4	18.4	0.0	18.5	18.5	0.0	East of diagonal power line
493525	14.5	14.2	-0.2	14.9	14.6	-0.3	15.4	15.1	-0.3	West of Lora Lane
495332	13.3	12.8	-0.6	13.9	13.5	-0.4	14.5	14.2	-0.3	West of Lora Lane
495348	12.3	11.5	-0.8	12.9	11.9	-1.0	13.3	12.3	-1.0	North of Ridgemoor B.
495304	15.3	15.3	0.0	15.6	15.6	0.0	15.8	15.8	0.0	West of Coventry Village
496100	15.9	15.9	0.0	15.9	15.9	0.0	16.1	16.2	0.1	Northeast of Hawks Landing
496340	10.1	10.5	0.4	11.9	12.0	0.2	12.4	12.5	0.1	East of Warwick Hills
497070	10.0	10.0	0.0	10.1	10.1	0.0	11.7	11.9	0.2	South of Woodridge Lakes
Ridgemoor to Tarpon Woods Boulevard										
497088	10.4	9.8	-0.6	10.9	10.4	-0.5	11.5	10.8	-0.6	Brooker Creek Channel So. Of Ridgemoor Blvd.
497090	10.3	9.7	-0.5	10.8	10.3	-0.5	11.2	10.0	-1.2	Brooker Creek Channel So. Of Ridgemoor Blvd.
497096	8.6	7.9	-0.7	9.2	8.7	-0.5	9.8	9.4	-0.4	West of Tarpon Woods
Nodes around perimeter of Toniwoods										
500050	8.7	8.6	-0.1	9.2	8.9	-0.3	9.8	9.4	-0.4	Tarpon Woods Subdivision
500140	10.3	9.6	-0.7	10.8	10.3	-0.5	11.2	10.9	-0.3	Tarpon Woods Subdivision
500210	10.3	9.6	-0.7	10.8	10.4	-0.4	11.2	11.2	-0.1	Tarpon Woods Subdivision
500300	9.9	9.9	0.0	10.1	10.1	0.0	10.2	10.2	0.0	Tarpon Woods Subdivision
South of Tarpon Woods Boulevard										
497107	4.8	4.9	0.1	7.3	7.3	0.0	9.0	9.0	-0.1	South of Tarpon Woods Blvd.
496410	7.9	8.1	0.2	8.5	8.5	0.0	9.3	9.3	0.0	East Woodlands Pkwy. Area
496600	7.3	7.5	0.2	8.3	8.3	0.1	9.2	9.2	0.0	South of Woodlands Blvd.

Table 3.3.12c Stage Comparison between Alternatives C1, 2, and 7

	Node Name	5yr - 24Hr			25yr - 24Hr			100yr - 24hr			Location
		Exist.	Prop.	Diff.	Exist.	Prop.	Diff.	Exist.	Prop.	Diff.	
		ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	
	The Preserve										
	Ridgemoor to Tarpon Woods Boulevard										
Alt C1	497090	10.3	9.7	-0.5	10.8	10.3	-0.5	11.2	10.0	-1.2	Brooker Creek Channel So. Of Ridgemoor Blvd.
Alt 2	497090	10.3	10.0	-0.3	10.8	10.6	-0.2	11.2	11.1	-0.1	Brooker Creek Channel So. Of Ridgemoor Blvd.
C1 - 2			-0.2			-0.3			-1.1		
Alt 7	497090	10.3	9.7	-0.5	10.8	10.3	-0.5	11.2	10.8	-0.4	Brooker Creek Channel So. Of Ridgemoor Blvd.
C1 - 7			0.0			0.0			-0.8		

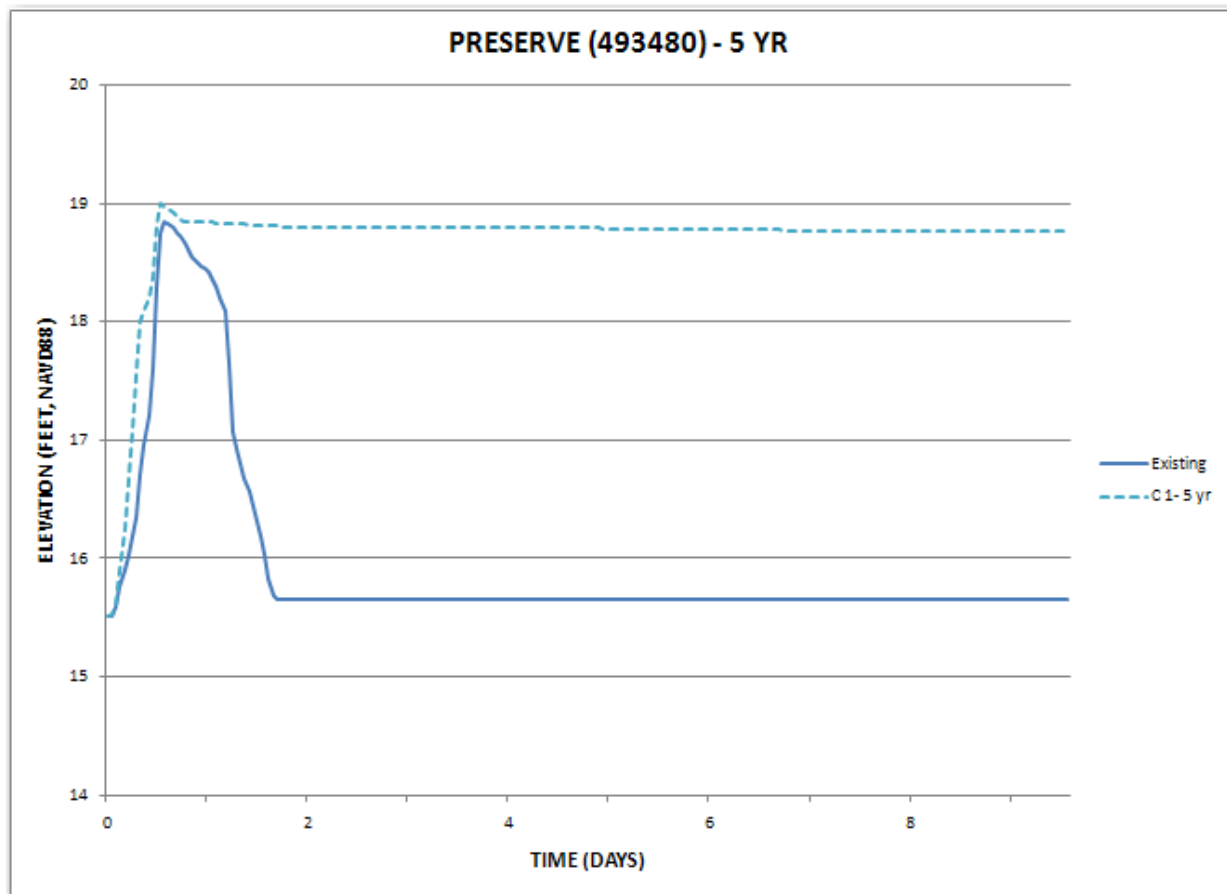


Figure 3.3.12b: Flood duration in Preserve, Alternative C1

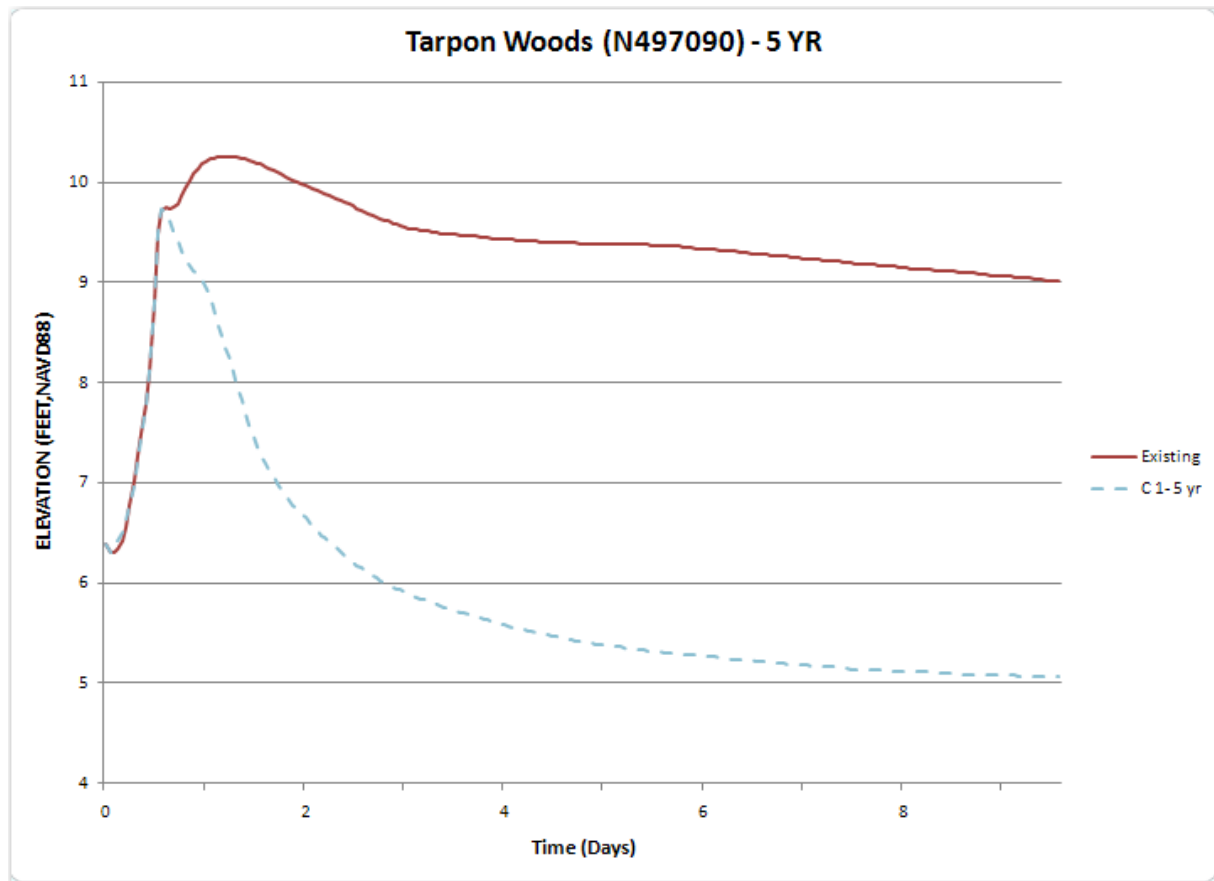


Figure 3.3.12c: Flood duration in Tarpon Woods, Alternative C1

3.3.13 Alternative C2: Weir Construction/ Culvert Addition / Brooker Creek Channel Improvements

Alternative C2 is a combination of the BMPs in Alternatives 2 and 8. It includes adding culverts at existing crossings in the Preserve and constructing weirs upstream of the crossings. It also includes construction of a 50' wide high flow channel from Ridgemoor Boulevard to Tarpon Woods Boulevard. The location of this alternative is shown below. For more information about existing and proposed conditions for Alternatives 2 and 8 refer to Sections 3.3.2 and 3.3.8, respectively.

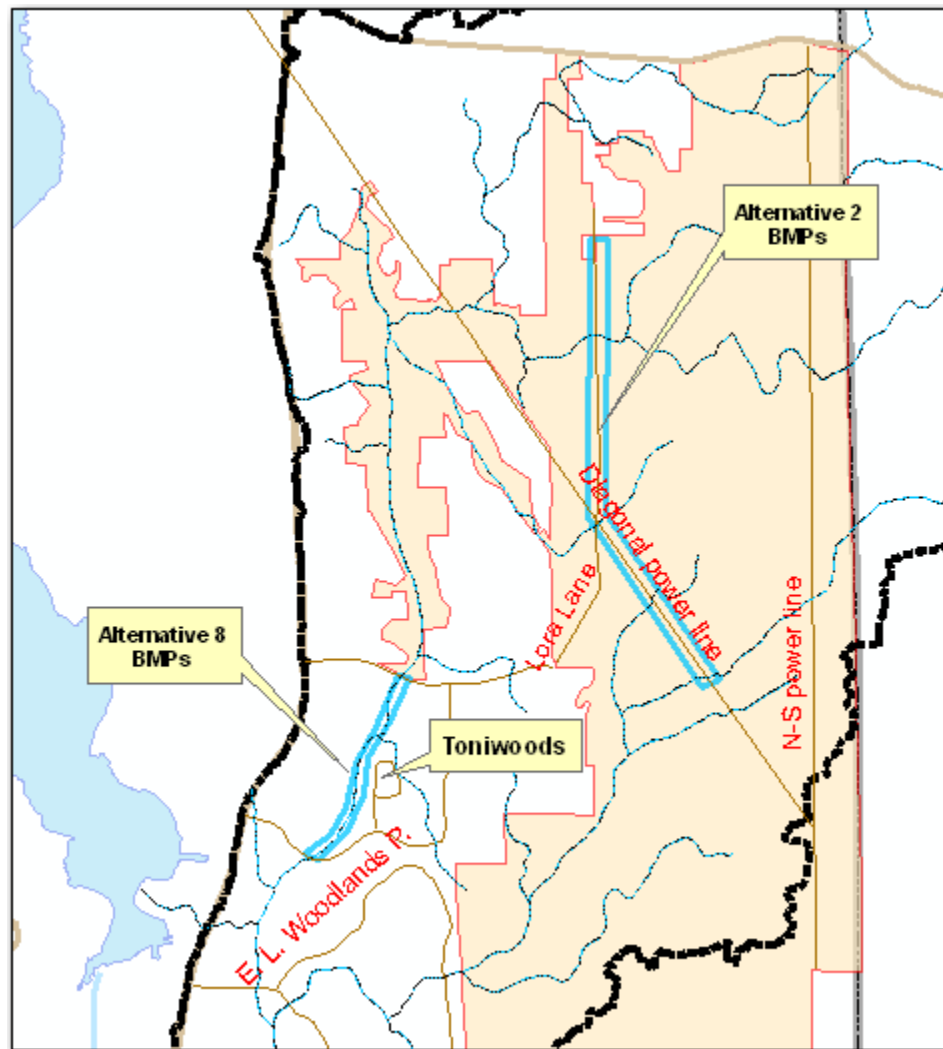


Figure 3.3.13b: Alternative C2 BMPs

Cost Estimates:

Table 3.3.13a Construction Cost Estimates for Alternative C2

Name	Description	Estimated Construction Costs (US \$)
Alternative 2	Construct weir structures at Lora Lane and various power line crossings	\$176,080
Alternative 8	Brooker Creek high flow channel through golf course	\$7,096,560
Alternative C2 Total:		\$7,272,640

Model Results:

Flood Peaks - Peak flood elevations at the monitor nodes are tabulated in Table 3.3.13b for the existing and proposed conditions for the 5-, 25-, and 100- year events. Refer to Appendices A and B for complete results. This alternative increases water levels upstream of the proposed weirs in the Preserve between 0 and 0.5' during passage of each of the three events. This alternative reduces flood stages in the Tarpon Woods between 0.4' and 2.5' during passage of the 3 events.

Installing the weirs has upstream and downstream impacts on water levels during passage of these events. The increase in water level upstream of the weirs diverts the water south along the power line road, increasing the flow rates from other crossings, which results in road overtopping. This causes an increase in water elevations of between 0 and 0.3' downstream of Tarpon Woods Boulevard. Downstream of the proposed weirs, peak flood stages are lower in the wetlands between Lora Lane and Ridgemoor Boulevard by a maximum of 0.5' for the three events because more water is retained in front of the weirs during passage of the flood. Immediately upstream of Ridgemoor Boulevard (Node 495348) the stage is reduced by a maximum of 1.0' partially due to the influence of the diversion.

Flood Duration – The duration of flooding would be increased in the Preserve. Refer to Figure 3.3.13b. The drawdown rate is slowed from approximately one day to more than ten days. The duration of flooding in the Tarpon Woods area would be reduced if this alternative is implemented. The stage would be reduced from 9.5' to 5.6' on day four of the 5-year event simulation. Refer to Figure 3.3.13c for the 5- year comparison, and to Figure 4.2, in Section 4, for a comparison of water levels during the 25-year event.

Recommendations:

This alternative would increase stages and duration of flooding in the Preserve, and it would decrease stages and duration of flooding in the Tarpon Woods area. The cost is less than the cost of purchasing flood affected properties. It has an environmental benefit, but the environmental impacts would be high. An Environmental Resource Permit would be required. The difficulty of permitting and land acquisition would be high. The implementation priority is low because of environmental impacts and land acquisition issues.

Because the implementation of this alternative was found to reduce the rate of drawdown of the water levels in the Preserve during this event based analysis, it is reasonable to assume the same would occur during low flow periods. This means water levels in surrounding wetlands could be managed more effectively. Filling of the ditches associated with this alternative could be performed as a separate project to provide restoration benefit to the Preserve.

Downstream in the Tarpon Woods area, faster drawdown in the main channel would allow water levels in the streets and yards to recede sooner. This is contingent on adequate capacity of the storm water system between the subdivision and the Brooker Creek channel.

There is an advantage in combining Alternatives 2 and 8 over implementing only Alternative 8. Simulated flood stages in Tarpon Woods would be lower for C2 and 8 for the 5-, 25-, and 100-year events. Refer to Table 3.1.13c.

Future design activities could include:

- Updating the model by incorporating the topographic information collected by Florida Department of Environmental Management, District field data collection, and additional surveys;
- Design of alternative weir controls to allow the County to manage water levels in the Preserve during low flows;
- Detailed evaluation of the impact of filling ditches in the Preserve;
- Model simulations using long term historical rainfall data to test these more detailed alternatives; and
- Evaluation and design of outlet systems for developments in Tarpon Woods in order to take advantage of the improvements in the main channel.

Table 3.3.13b Stage Comparison for Alternative C2

Node Name	5yr - 24Hr			25yr - 24Hr			100yr - 24hr			Location
	Exist.	Prop.	Diff.	Exist.	Prop.	Diff.	Exist.	Prop.	Diff.	
	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	
The Preserve										
493320	19.8	19.8	0.0	20.0	20.0	0.1	20.2	20.2	0.1	East of Lora Lane
493450	18.8	19.0	0.1	19.1	19.2	0.1	19.3	19.4	0.1	East of Lora Lane
493480	18.8	19.0	0.2	19.1	19.2	0.1	19.3	19.4	0.1	East of Lora Lane
494150	17.0	17.2	0.2	17.7	18.2	0.5	18.6	18.8	0.2	East of Lora Lane
494205	19.0	19.0	0.0	19.1	19.1	0.0	19.1	19.1	0.0	East of diagonal power line
494240	18.2	18.2	0.0	18.4	18.4	0.0	18.5	18.5	0.0	East of diagonal power line
493525	14.5	14.2	-0.2	14.9	14.6	-0.3	15.4	15.1	-0.3	West of Lora Lane
495332	13.3	12.8	-0.5	13.9	13.6	-0.4	14.5	14.2	-0.3	West of Lora Lane
495348	12.3	11.8	-0.5	12.9	12.6	-0.3	13.3	12.3	-1.0	North of Ridgemoor B.
495304	15.3	15.3	0.0	15.6	15.6	0.0	15.8	15.8	0.0	West of Coventry Village
496100	15.9	15.9	0.0	15.9	15.9	0.0	16.1	16.2	0.1	Northeast of Hawks Landing
496340	10.1	10.5	0.4	11.9	12.0	0.2	12.4	12.5	0.1	East of Warwick Hills
497070	10.0	10.0	0.0	10.1	10.1	0.0	11.7	11.9	0.2	South of Woodridge Lakes
Ridgemoor to Tarpon Woods Boulevard										
497088	10.4	8.8	-1.6	10.9	10.0	-1.0	11.5	10.8	-0.6	Brooker Creek Channel So. Of Ridgemoor Blvd.
497090	10.3	7.8	-2.5	10.8	9.1	-1.7	11.2	10.8	-0.4	Brooker Creek Channel So. Of Ridgemoor Blvd.
497096	8.6	6.6	-2.1	9.2	8.3	-0.9	9.8	9.4	-0.4	West of Tarpon Woods
Nodes around perimeter of Toniwoods										
500050	8.7	8.6	-0.1	9.2	8.9	-0.3	9.8	9.4	-0.4	Tarpon Woods Subdivision
500140	10.3	8.9	-1.4	10.8	9.8	-1.0	11.2	10.9	-0.3	Tarpon Woods Subdivision
500210	10.3	9.6	-0.7	10.8	10.4	-0.4	11.2	11.2	-0.1	Tarpon Woods Subdivision
500300	9.9	9.9	0.0	10.1	10.1	0.0	10.2	10.2	0.0	Tarpon Woods Subdivision
South of Tarpon Woods Boulevard										
497107	4.8	5.0	0.2	7.3	7.6	0.3	9.0	9.0	-0.1	South of Tarpon Woods Blvd.
496410	7.9	8.1	0.2	8.5	8.5	0.0	9.3	9.3	0.0	East Woodlands Pkwy. Area
496600	7.3	7.5	0.2	8.3	8.4	0.1	9.2	9.2	0.0	South of Woodlands Blvd.

Table 3.1.13c Stage Comparison between Alternatives C2, 2, and 8

		5yr - 24Hr			25yr - 24Hr			100yr - 24hr			Location
		Exist.	Prop.	Diff.	Exist.	Prop.	Diff.	Exist.	Prop.	Diff.	
		ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	
	The Preserve										
	Ridgemoor to Tarpon Woods Boulevard										
Alt C2	497090	10.3	7.8	-2.5	10.8	9.1	-1.7	11.2	10.8	-0.4	Brooker Creek Channel So. Of Ridgemoor Blvd.
Alt 2	497090	10.3	10.0	-0.3	10.8	10.6	-0.2	11.2	11.1	-0.1	Brooker Creek Channel So. Of Ridgemoor Blvd.
C1 - 2			-2.2			-1.5			-0.3		
Alt 8	497090	10.3	7.8	-2.5	10.8	9.2	-1.6	11.2	10.8	-0.4	Brooker Creek Channel So. Of Ridgemoor Blvd.
C1 - 8			0.0			-0.1			0.0		

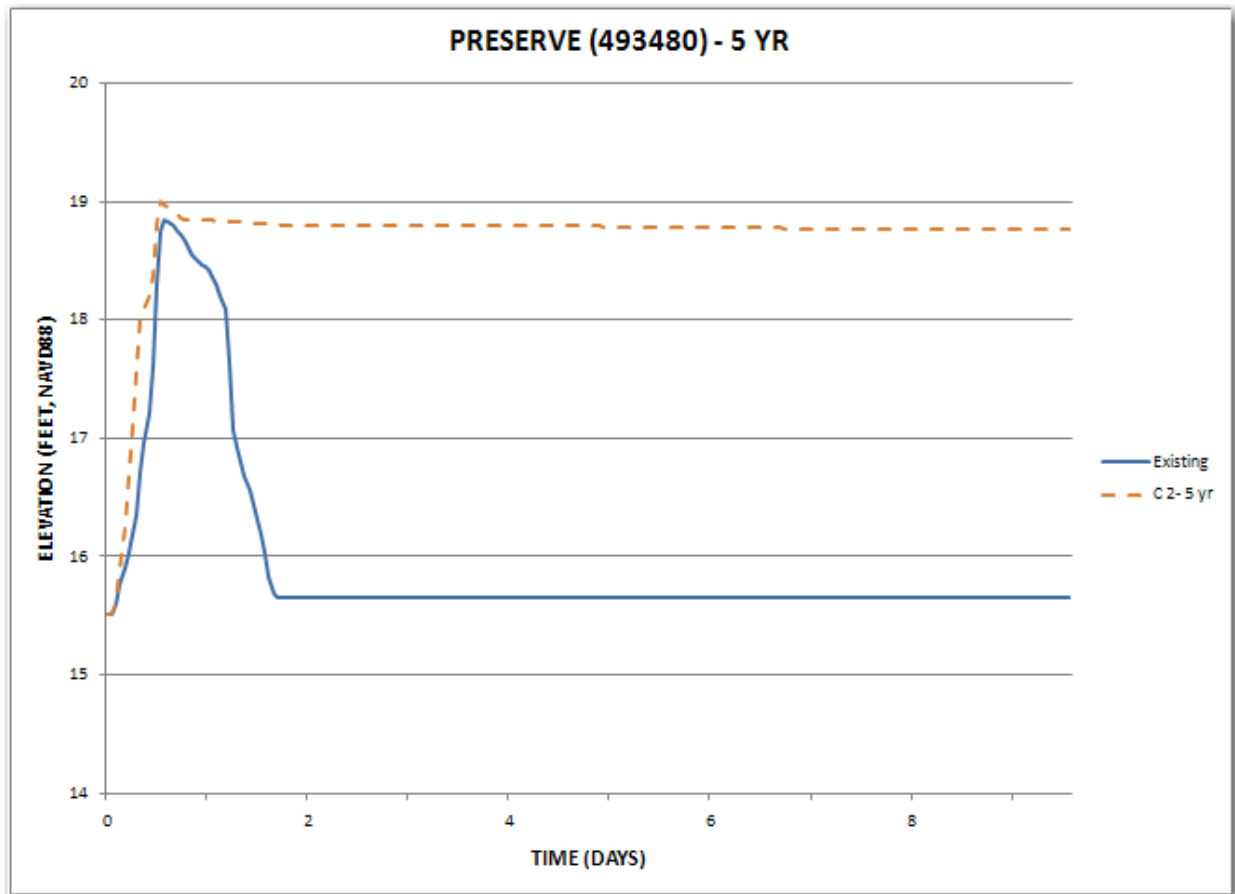


Figure 3.3.13c: Flood duration in Preserve, Alternative C2

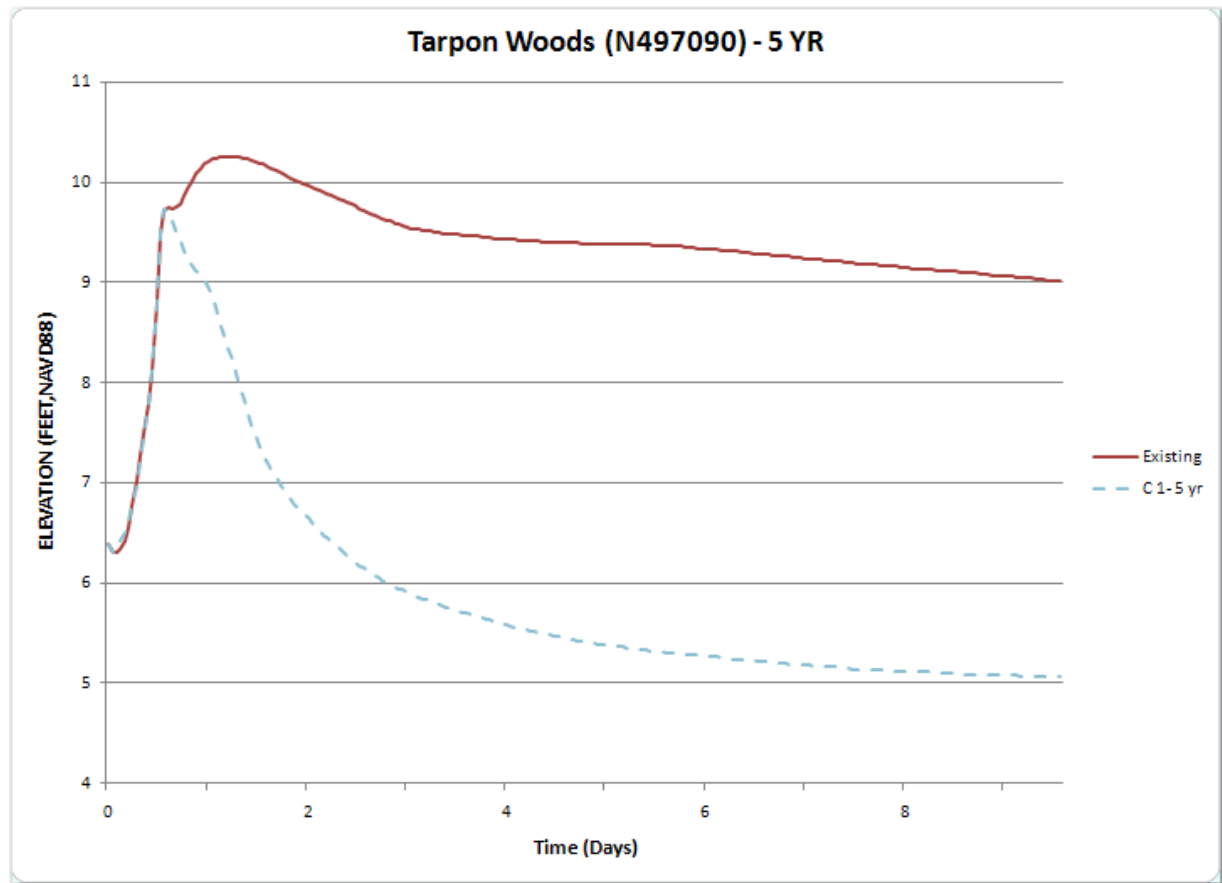


Figure 3.3.13b: Flood duration in Tarpon Woods, Alternative C2

4.0 SUMMARY OF FINDINGS

This BMP analysis provides Pinellas County Department of Environmental Management and Public Works the benefits, costs, and issues to be addressed in planning future implementation projects. A summary of the findings and recommendations for each alternative is in Table E.1.

High Priority for Implementation - The alternatives with a high priority for implementation are Alternatives 1, and 2. These are ranked high because they benefit wetland hydrology in the Preserve, they provide improved flood protection for the Tarpon Woods area, and permitting and land acquisition are not considered to be major issues. The cost of implementation of these alternatives is less than the cost of property acquisition. Costs are \$104,440 for Alternative 1, and \$176,080 for Alternative 2. The County owns the land where Alternatives 1 and 2 are located.

Medium Priority for Implementation - The alternatives with a medium priority for implementation are Alternatives 3, 7, 9, 10, and 11. These are ranked medium because the conceptual design needs refinement (3), the BMPs would not improve wetland hydrology in the Preserve (7, 10, 11), or the BMP would not lower peak stages in Tarpon Woods (9). The cost of implementing these alternatives ranges from \$500,000 for Alternative 9 to \$10,000,000 for Alternative 10.

Low Priority for Implementation - The alternatives with a low priority for implementation are Alternatives 4, 5, 6, and 8. These are ranked low because of high cost (4, 5 and 6), lack of effectiveness (6), or high environmental impacts, land acquisition, and permitting difficulties (8). Alternative 8 would reduce stages and duration of flooding in Tarpon Woods more than any other alternative, but it would not benefit hydrology in the Preserve. The cost of implementing these alternatives ranges from \$7,096,560 for Alternative 8 to \$67,419,170 for Alternative 4.

Priority for Combined Alternatives - In response to a request from the Pinellas County Public Works Department, two combined alternatives were evaluated to improve the flood protection benefits of Alternative 2. C1 combines Alternatives 2 and 7, and is given a medium priority for implementation because the permitting and land acquisition difficulty is medium for Alternative 7. C2 combines Alternatives 2 and 8, and is given a low priority because of environmental impacts, and the permitting and land acquisition difficulty is high for Alternative 8.

Future design activities could include:

- Updating the model by incorporating the topographic information collected by Florida Department of Environmental Management, field data collected by the District, and additional surveys;
- Design of alternative weir controls to allow the County to manage water levels in the Preserve during low flows;
- Detailed evaluation of the impact of filling ditches in the Preserve;
- Model simulations using long term historical rainfall data to test these more detailed alternatives; and

- Evaluation and design of outlet systems for developments in Tarpon Woods in order to take advantage of the improvements in the main channel.

An assessment of all available drainage easements and available right-of-way (R/W) throughout the watershed should be performed. An initial assessment shows that the main drainage conveyances are currently not protected with easements or R/W. Also, maintenance of existing systems is hampered by a lack of accessibility.

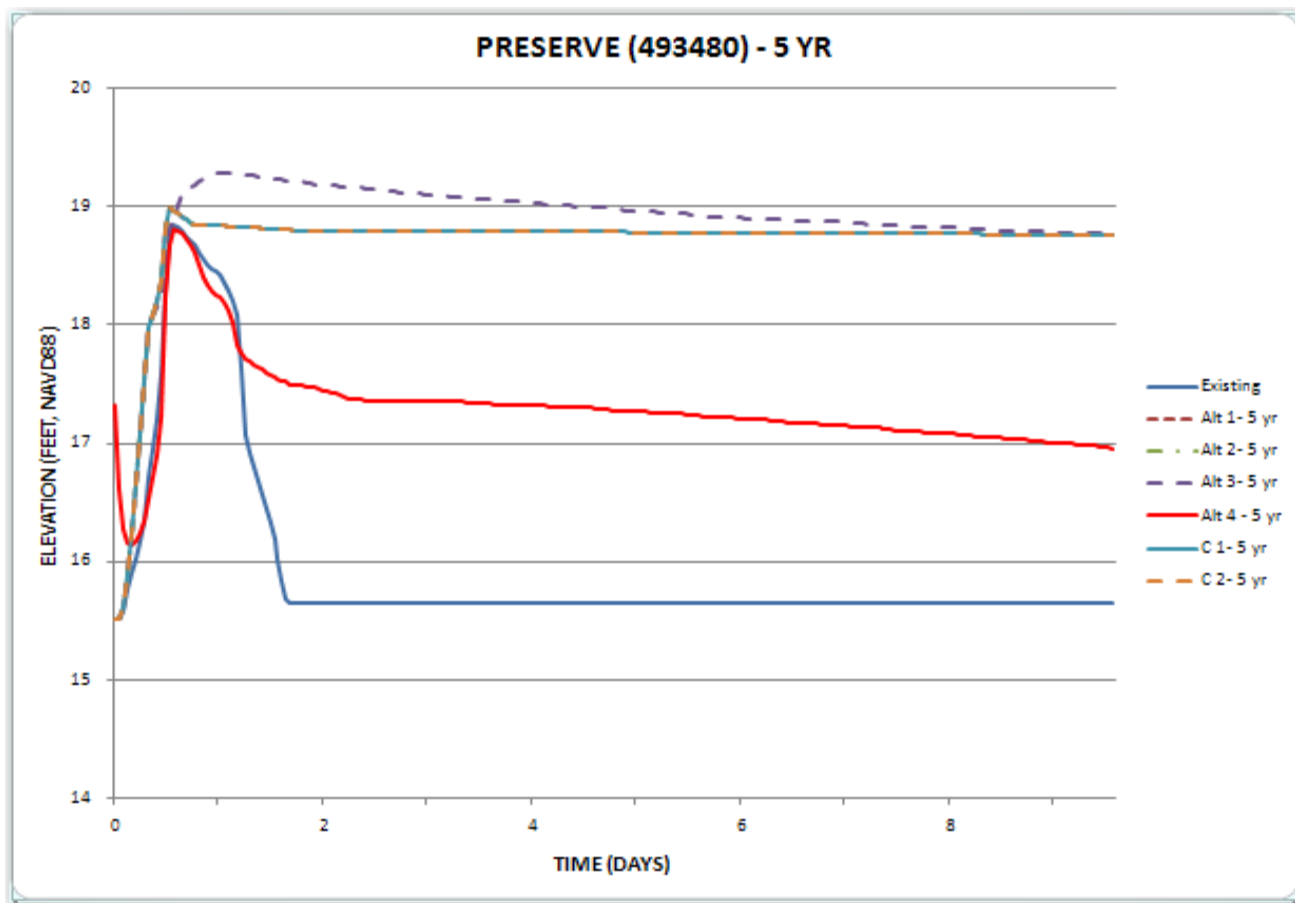


Figure 4.1: Duration of flooding in the Preserve area - 5 year, 24 hour event.

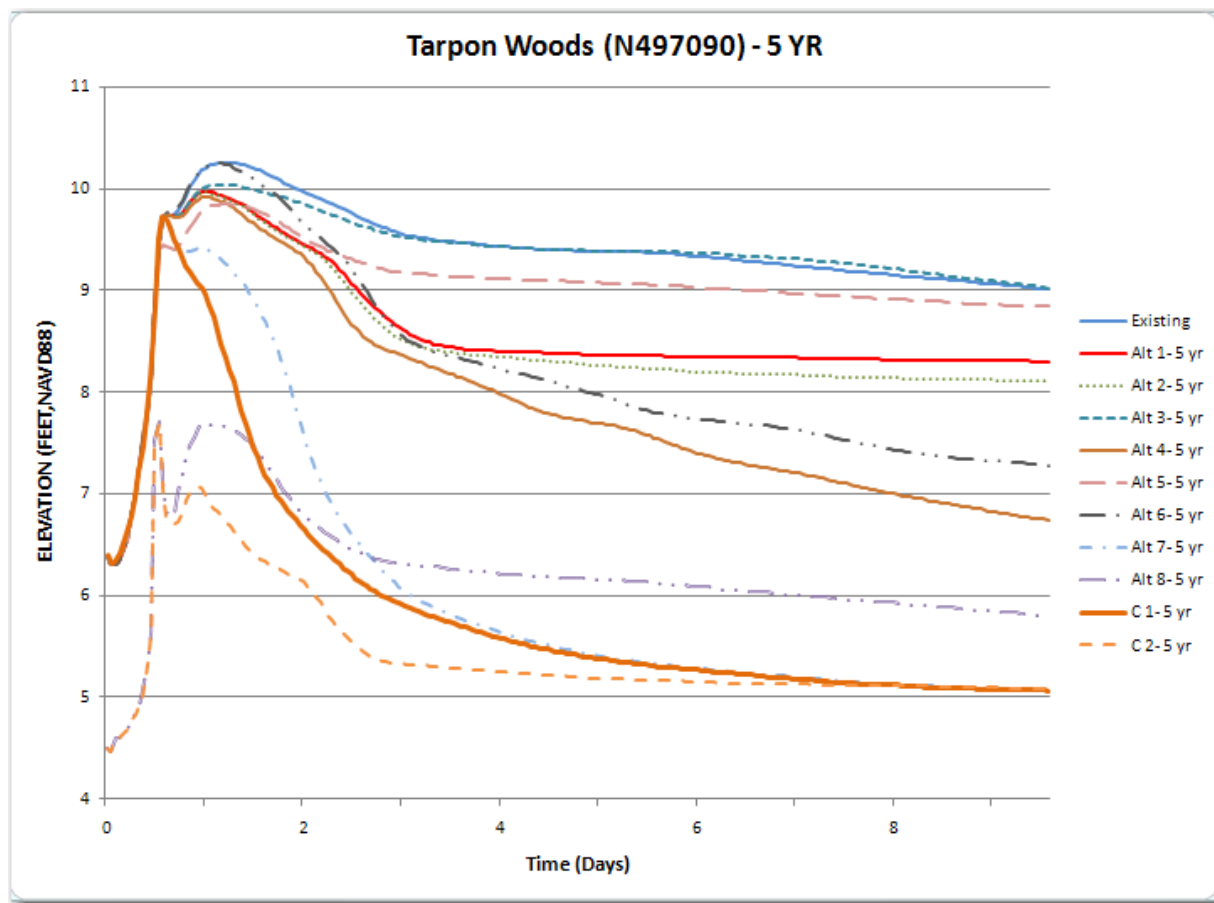


Figure 4.2: Duration of flooding in the Tarpon Woods area - 5 year, 24 hour event.

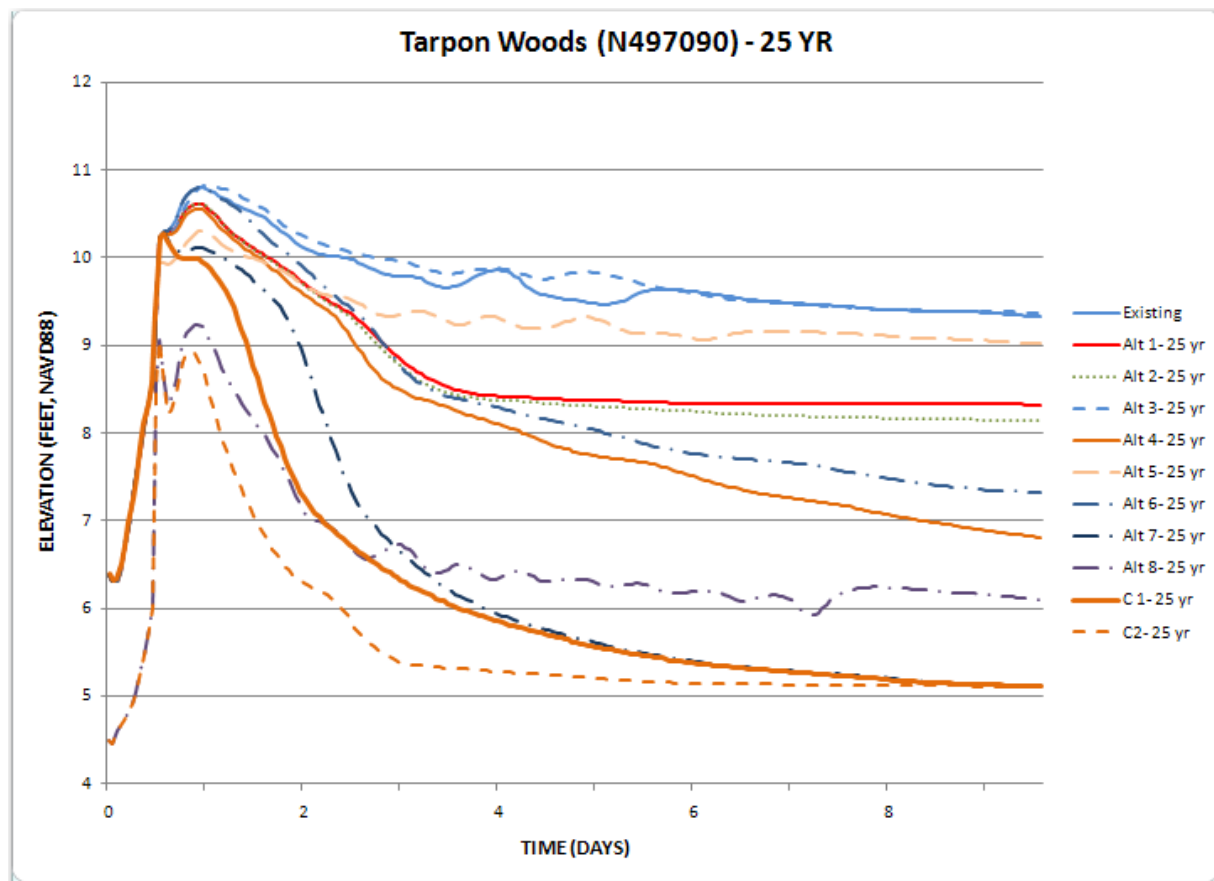


Figure 4.3: Comparison of duration of flooding in the Tarpon Woods area – 25 year, 24 hour event.

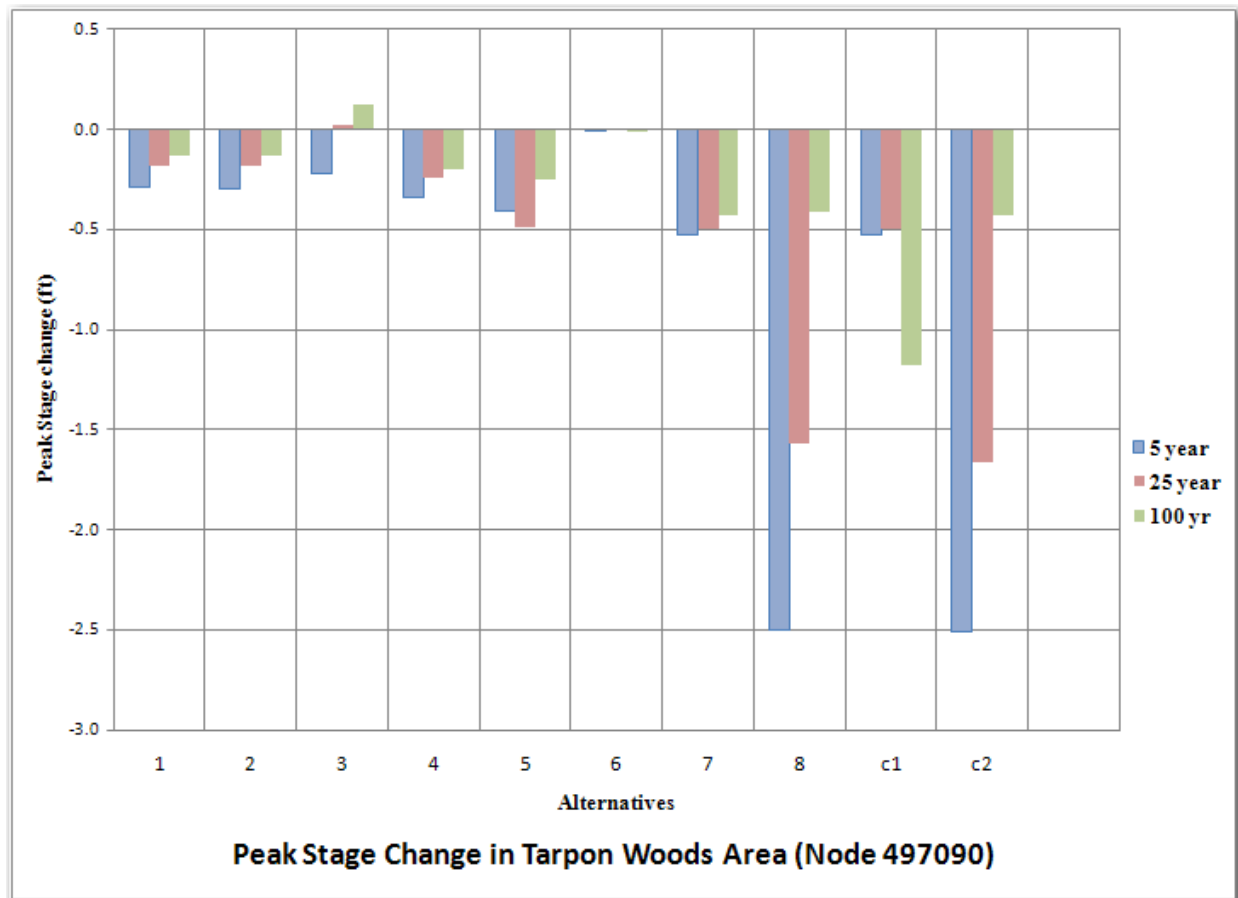


Figure 4.4: Comparison of alternative stage reductions in the Tarpon Woods area

Table 4.1 Final Alternative BMP Evaluation and Cost Matrix

			The Preserve			Tarpon Woods					
Alt.	Description	Cost	Historic Flow Paths Restored	Flood stages recede slower @ day 4 (Value)	Increases Flood Stages (Value) [See note 1]	Reduces Flood Stages (Value) [See note 1]	Flood stages recede faster @ day 4 (Value)	Impacts & Permitting Difficulty	Land Acquisition Difficulty	Implementation Priority	Comments
1	Add culverts and construct upstream weir structures at Lora Lane. Fill the ditch west of Lora Lane	\$104,440	No	Yes (3' higher)	Yes (0.1'-0.2')	Yes (0.1'- 0.3')	Yes (1.1' lower)	Low	Low	High	This alternative would improve Preserve hydrology, and it reduces flooding problems (mainly duration) in Tarpon Woods at a relatively low cost.
2	Implement Alternative 1 and add culverts and weir structures at two power line road crossings. Fill the road ditches along the diagonal power-line road	\$176,080	Yes	Yes (3' higher)	Yes (0.1' - 0.2')	Yes (0.1' - 0.3')	Yes (1.2' lower)	Low	Low	High	This alternative includes the benefits of Alternative 1, and would restore the Channel L historic flow path.
3	Implement Alternative 2 and raise the elevation of 16,000’ of Lora Lane and the diagonal power line road by three feet.	\$6,332,800	No	Yes (3.4' higher)	Yes (0.4' - 1.1')	Yes (0.1' - 0.2')	No	Medium	Low	Medium	The conceptual design needs to be refined to address flood waters spilling south into Double Branch Watershed, and to restore historic flow paths for Channel L and G. It has potential for environmental and flood protection benefits.
7	Gravity flow diversion at East Lake Rd. to Lake Tarpon	\$5,329,270	No	No	No	Yes (0.4' - 0.5')	Yes (3.8' lower)	Medium	Medium	Medium	This alternative would improve flood protection, but not Preserve hydrology. Land acquisition and permitting difficulty make this a medium priority
9	Low water crossings at the north – south power line road along the east boundary of the Preserve	\$500,000	Yes	No	No	No	No	Low	Low	Medium	This alternative would restore historic flow paths into the Preserve, but would not improve flood protection in Tarpon Woods.
10	Acquisition of Flood Affected Properties	\$10,000,000	No	No	No	No	No	Low	High	Medium	This alternative could be implemented instead of the BMPs designed to improve flood protection.
11	Channel Maintenance – Ridgemoor Blvd. to Tarpon Woods Blvd.	\$500,000	No	No	No	Yes (*)	Yes (*)	Low	High	Medium	*Alternative 11 is not considered effective for reducing stages in Tarpon Woods for the 5-, 25- and 100-year events, but it could reduce stages during the more frequent rain events.
C1	Combine Alternatives 2 and 7	\$5,505,350	Yes	Yes (3' higher)	Yes (0.1' - 0.2')	Yes (0.5' - 1.2')	Yes (3.8' lower)	Medium	Medium	Medium	This alternative includes the benefits of 2 and 7, but land acquisition and permitting difficulty associated with Alternative 7 make this a medium priority.
4	Diversion channel adjacent to Lora Lane and diagonal power line road to outfall to Lake Tarpon Canal	\$67,419,170	No	Yes (1.6' higher)	Yes (0 - 1.2')	Yes (0.2' - 0.3')	Yes (1.5' lower)	High	High	Low	The high cost of this alternative, and the environmental impacts and permitting difficulty make this a low priority for implementation.
5	Pump diversion for Brooker Creek at Ridgemoor Blvd. to Lake Tarpon	\$15,865,690	No	No	No	Yes (0.1')	Yes (0.4' lower)	Medium	Medium	Low	The high cost, relatively low flood protection benefit, and no benefit to the Preserve make this alternative a low priority.
6	Pump diversion from Brooker Creek / expand existing borrow pit north of Keystone Rd.	\$30,925,950	No	No	No	No	Yes (1.3')	Medium	Low	Low	This alternative is a low priority because it doesn’t benefit the Preserve, the flood protection benefit is low, and the cost exceeds Alternative 10.
8	Brooker Creek high flow channel between Ridgemoor Blvd. & Tarpon Woods Blvd.	\$7,096,560	No	No	No	Yes (0.4 - 2.5')	Yes (3.3' lower)	High	High	Low	This Alternative would reduce flooding more than any other, but it would not benefit the Preserve. Permitting and land acquisition would be difficult so it is a low priority.
C2	Combine Alternatives 2 and 8	\$7,272,640	Yes	Yes (3' higher)	Yes (0.1' - 0.3')	Yes (0.4' - 2.5')	Yes (3.9' lower)	High	High	Low	This alternative includes the benefits of 2 and 8, but it is ranked low because of the impacts, permitting and land acquisition issues for Alternative 8.

Note 1: The range of values for the 5-, 25-, and 100- year events is shown at Node 494380 in the Preserve and 497090 in the Tarpon Woods area.

4.1 Other Recommendations

4.1.1 Easement Assessment

An assessment of all available drainage easements and available right-of-way (R/W) throughout the watershed should be performed. An initial assessment shows that the main drainage conveyances are currently not protected with easements or R/W. Maintenance of existing systems is also hampered by a lack of accessibility in many areas.

Funding Sources

Several funding sources were identified in the September/October 2005 stormwater article titled “Finding the Money for Stormwater Management” by Lynn Merrill. In addition to the General Fund which derives finances through property and sales taxes, the author identified Enterprise Funds, Special Districts, Development Fees, Bond Financing, Grants, and Tag Fees. Brief descriptions and positive and negative aspects are summarized below.

- Enterprise Funds/Stormwater Utility
 - Designated for a specific set of services.
 - Derived from fees that are established by a governing body – city council, board of county commissioners.
 - The fees are based on a measurable service unit such as street sweeping, catch basin and ditch clean out.
 - Feasibility studies are necessary for developing a legally defensible fee schedule.
- Special Districts
 - Provides funding for a specific geographical area.
 - Typically formed when large parcels of land are subdivided and developed.
 - Fees could pay for annual maintenance of catch basins, trash racks, and oil and grease interceptors.
 - There is no ability to “opt out” once it is established.
- Development Fees
 - A one time charge where a developer pays to accommodate for infrastructure improvements that would account for the anticipated increased stress on existing infrastructure.
 - The fee charged must pass a “reasonability test”.
- Bond Financing
 - A self imposed tax authorized by the constituency through a public vote.
 - Education of the voters on the importance of the measure is the key to a successful bond measure. Therefore it is important to build a strong coalition between the regulated community, regulators, and the environmental activist community.
 - A good bond rating is necessary to obtain a low interest rate.

- Grants
 - o Funds obtained from various state and federal agencies. A table of potential funding sources is provided below.
 - o The applicant must show the potential benefits and show a commitment to the project. Funding for future phases and operation and maintenance of the completed project must be identified prior to the initial application.
 - o The project must be transferable from one agency to another.
 - o Grants should not be looked upon as a substitute for operation and maintenance typically derived from general funds.
 - o Grants are highly competitive.
 - o Identifying the true intent of the fund source is important; therefore, communication with the funding agency is critical to obtaining the grant.
- Tag Fees
 - o San Mateo County, California has issued a \$4.00 motor vehicle license fee to fund stormwater pollution and traffic mitigation.

Additional Sources

Additional funding sources for stormwater projects were obtained from the Internet. The following table is from the Florida Stormwater Association website <http://www.florida-stormwater.org/manual/chapter8/8-3.html>.

FUNDING SOURCES FOR STORMWATER MANAGEMENT PROJECTS ⁽¹⁾

Agency	Title	Purpose & Contact Information
Florida Department of Community Affairs	Small Cities Community Development Block Grants	Provides grants to eligible local governments for neighborhood or commercial revitalization and economic development, including infrastructure improvements. Municipalities with populations less than 50,000 and counties with less than 200,000 are eligible. (850) 487-3644 www.dca.state.fl.us
Florida Department of Environmental Protection Bureau of Water Facilities Funding	State Revolving Fund Loan Program	Provide low-interest loans (3% below current market rate) to local governments for construction of wastewater and stormwater management facilities. Facilities plan required. Submit request for inclusion on a priority list form. Other grants from this agency and bureau: Special Bond Loan Program, Pollution Control Bond Program.(850) 245-8358 www.dep.state.fl.us/water/wff/index.htm
U.S. Department of Agriculture	Watershed Protection & Flood Prevention	Provides technical and financial assistance in planning and implementing improvements to protect, develop and utilize the land and water resources in small watersheds. Other grants from this agency: Wetlands Reserve Program, River Basin Surveys &

Agency	Title	Purpose & Contact Information
		Investigations, Water & Wastewater Disposal Systems for Rural Communities. (202) 720-3042 www.nrcs.usda.gov/programs/watershedops
U.S. Department of Housing & Urban Development	Community Development Block Grants Entitlement Communities Program	Provides cities and urban counties with annual direct grants to revitalize neighborhoods, expand affordable housing and economic opportunities and/or improve community facilities and services. Municipalities of 50,000 or more and urban counties of at least 200,000 are eligible. (202) 708-1577 www.hud.gov
Florida Department of Community Affairs	Florida Communities Trust	Provides grants and loans for the acquisition of conservation and recreation lands that are needed to implement local government comprehensive plans. Matching and full grants for land acquisition projects are provided to communities through an annual competitive application cycle.(850) 922-2207 www.dca.state.fl.us/ffct
Florida Department of Community Affairs	Coastal Management Grants Program	Provides grants for priority issues identified in the Florida Coastal Action Plan. May include protection and management of coastal resources, improved interagency communication, coastal development and redevelopment, improved beach access, hazard mitigation, and waterfront revitalization. Other grants from this agency: Local Mitigation Strategy Program (a FEMA program), Waterfronts Florida, Florida Energy Efficient Water Protection.(850) 922-5438 www.dca.state.fl.us
Florida Department of Environmental Protection Division of Water Resource Management	Section 319-Nonpoint Source Management Implementation	Provides grant funding for the implementation of nonpoint source management controls. A 40% non-federal match is required. (850) 245-8430 www.dep.state.fl.us/water/nonpoint/index.htm
Florida Department of Environmental Protection Office of Greenways & Trails	Florida Greenways and Trails Program	This program provides acquisition funds for the purchase of greenways and trails.(850) 245-2052 www.dep.state.fl.us/gwt
Florida Department of Environmental Protection Division of Recreation & Parks	Florida Recreation Development Assistance Program	Provides grants for local outdoor recreation projects. Can be combined with Stormwater education and water quality projects.(850) 245-2043 http://www.dep.state.fl.us/parks

Agency	Title	Purpose & Contact Information
Water Management Districts	Stormwater Management Funding	The District has a competitive cost-share program that provides by a maximum of 50% funding to local governments, special districts and other public entities for stormwater management projects. Other WMDs provide some funding on a case-by-case basis. www.dep.state.fl.us/secretary/watman/index.htm
Florida Department of Transportation	Mitigation of Water Quality Impacts from Highway SW Runoff	Provides grants to improve and protect water quality from potential adverse effects of nonpoint source discharges/stormwater runoff from highway and transit facilities. www.dot.state.fl.us/emo
Trust for Public Land (TPL)	Financing Program for Parks and Natural Areas	TPL is a private conservation organization dedicated to acquire and convey land into public ownership. Acquires land for natural resource, historic, cultural, and recreational purposes. Programs include: lease/purchase, buy and hold, and phased acquisition.(850) 222-7911 www.tpl.org
U.S. Environmental Protection Agency	Water Quality Grants	Provides grants for unique and new approaches to meeting stormwater, combined sewer outflows, sludge and pretreatment requirements. Other grants from this agency: Drinking Water State Revolving Fund, Environmental Education Grants, Sustainable Development, Brownfield Redevelopment, Nonpoint Source Implementation Grants, National Estuary Program, Wetland Protection. www.epa.gov
Federal Emergency Management Agency	Hazards Mitigation Grant Program (HGMP)	Hazard Mitigation Grant Program funding is available in States following a Presidential declaration. Eligible applicants are: State and local governments, Indian tribes or other tribal organizations, and certain private non-profit organizations. www.fema.gov
Federal Emergency Management Agency	Flood Mitigation Assistance (FMA) Program	FMA provides funding to assist States and communities in implementing measures to reduce or eliminate the long-term risk of flood damage to buildings insurable under the National Flood Insurance Program (NFIP). www.fema.gov

⁽¹⁾ Based on information partially compiled by Berryman and Henigar, Inc.

5.0 DISTRICT ENVIRONMENTAL RESOURCE PERMIT CONCERNS

A total of thirteen (13) BMP alternatives were selected for detailed evaluation. All of the BMP alternatives except Alternative 10, purchase of flood-prone properties, would require Environmental Resource Permits (ERP's) from the Southwest Florida Water Management District. It is anticipated that the key items below would have to be addressed in the BMP ERP's.

5.1 Wetland Mitigation and Environmental Resource Permitting

- All BMP alternatives must maintain Seasonal High Water Table (SHWT) elevations in adjacent lakes and wetlands or mitigate impacts.
- Projects need to address floodplain impacts and compensation, and wetland impacts and mitigation.
- Wetland impacts are to be determined based on the Uniform Mitigation Assessment Method (UMAM) requirements.
- Water quality treatment ponds cannot be used for wetland mitigation.
- Wetland mitigation can be developed within flood storage ponds.
- Wet detention areas contributing to wetland areas need to have plantings and cannot be counted towards wetland mitigation.
- Any structural modification of the existing stormwater system would require an ERP, except for routine maintenance and culvert replacement.

5.2 Culvert Construction / Raising Road Elevations

Several of the preferred alternative BMPs include culvert construction and raising the road in low lying areas. The following would need to be considered:

- When considering pipe replacements, 1989 is considered "existing" conditions. Pipe replacements of older pipes (i.e. prior to 1989) or permitted pipes (i.e. after 1989) must have no impact on existing downstream flood stages.
- Storage may have to be provided for pipe replacements that increase the conveyance of existing or permitted pipes. "Staged culverts" could be used to maintain hydraulic equivalence.
- Can replace in-kind reinforced concrete pipe (RCP) or corrugated metal pipe (CMP) if no invert or size changes. Larger pipe sizes can compensate for raising the road to account for roadway overtopping. However, numerous small storms must be simulated to ensure hydraulic equivalence.

APPENDIX A

**Existing Conditions 5-Year 24-Hour
Existing Conditions 25-Year 24-Hour
Existing Conditions 100-Year 24-Hour**

APPENDIX B

**Alternative 1 Weirs
Alternative 2 Weirs
Alternative 3 Weirs Raise Road
Alternative 4 Diversion Channel
Alternative 5 Pump Diversion
Alternative 6 Borrow Pit
Alternative 7 East Lake Outfall
Alternative 8 Channel Improvement TBE
Alternative C1
Alternative C2**

APPENDIX C

**Alternative 1 25-Year Figure
Alternative 2 25-Year Figure
Alternative 3 25-Year Figure
Alternative 4 25-Year Figure
Alternative 5 25-Year Figure
Alternative 6 25-Year Figure
Alternative 7 25-Year Figure**

APPENDIX D

Brooker Creek BMP Cost Estimate

APPENDIX E

Weir Concept for BMP – Alternative 1-3

APPENDIX A

Existing Conditions 5-Year 24-Hour

EXISTING CONDITIONS 5-YEAR 24-HOUR

	JUNC ID	INVT	Z_MAX	T_MAX
ZMAX	490000	24.23	26.46	0.00
ZMAX	490004	26.46	27.84	25.85
ZMAX	490002	20.93	26.14	29.05
ZMAX	490008	27.00	28.09	29.87
ZMAX	490010	26.16	28.19	39.67
ZMAX	490020	24.36	28.20	26.73
ZMAX	490030	26.46	28.14	25.25
ZMAX	490040	29.00	29.90	26.57
ZMAX	490050	25.16	28.39	15.43
ZMAX	490070	25.96	29.13	26.62
ZMAX	490071	29.00	29.91	14.60
ZMAX	490072	27.00	28.02	27.30
ZMAX	490073	30.00	32.31	14.45
ZMAX	490080	27.66	29.13	27.27
ZMAX	490090	28.00	30.71	27.40
ZMAX	490100	29.00	29.69	14.10
ZMAX	490110	26.16	29.70	25.18
ZMAX	490120	30.64	33.01	69.33
ZMAX	490130	28.96	33.02	69.30
ZMAX	490140	29.26	31.53	240.00
ZMAX	490141	31.00	32.13	26.37
ZMAX	490150	29.89	33.27	67.15
ZMAX	490160	29.77	34.52	59.60
ZMAX	490170	35.00	38.56	26.23
ZMAX	490180	32.66	37.49	26.72
ZMAX	490181	33.75	37.49	26.82
ZMAX	490200	36.66	38.56	26.23
ZMAX	490210	36.29	38.35	0.00
ZMAX	490211	39.00	40.60	17.20
ZMAX	490220	40.04	42.02	15.35
ZMAX	490221	42.00	44.50	30.53
ZMAX	490230	39.95	40.97	25.65
ZMAX	490240	26.36	30.28	24.42
ZMAX	490250	29.00	32.36	21.48
ZMAX	490251	33.00	34.78	29.83
ZMAX	490260	31.16	33.28	16.17
ZMAX	490261	34.00	36.08	13.83
ZMAX	490263	34.00	35.25	28.05
ZMAX	490264	33.00	34.83	24.37
ZMAX	490266	34.00	35.80	16.42
ZMAX	490270	35.00	37.74	14.40
ZMAX	490280	32.70	34.78	29.83
ZMAX	490281	32.70	34.78	29.75
ZMAX	490290	31.00	34.39	16.30
ZMAX	490300	31.86	33.17	13.50
ZMAX	490310	33.00	36.26	18.32
ZMAX	490320	34.00	37.76	20.60
ZMAX	490321	36.00	38.24	37.90
ZMAX	490330	37.00	38.66	27.77
ZMAX	490340	35.00	37.83	14.20
ZMAX	490350	36.00	38.67	25.85
ZMAX	490370	33.96	35.92	25.73
ZMAX	490375	35.00	38.08	57.10
ZMAX	490390	34.56	37.97	24.93
ZMAX	490391	36.80	37.26	26.05
ZMAX	490392	36.40	36.82	15.00
ZMAX	490400	37.00	38.89	25.85
ZMAX	490401	37.00	39.37	25.98
ZMAX	490410	35.46	38.08	57.08
ZMAX	490411	36.00	38.08	57.08
ZMAX	490420	35.00	40.20	50.95
ZMAX	490421	39.00	39.74	28.53
ZMAX	490422	39.00	41.05	25.17
ZMAX	490425	38.00	40.20	51.63
ZMAX	490430	35.47	40.69	26.00
ZMAX	490440	40.00	42.84	26.75

EXISTING CONDITIONS 5-YEAR 24-HOUR

ZMAX	490450	39.00	40.58	57.92
ZMAX	490451	39.00	40.14	29.65
ZMAX	490453	39.00	40.14	31.75
ZMAX	490455	39.00	40.60	21.83
ZMAX	490460	43.00	45.73	27.53
ZMAX	490470	40.00	41.74	25.50
ZMAX	490480	39.67	42.00	0.00
ZMAX	490490	40.38	42.30	19.83
ZMAX	490500	41.00	44.61	59.72
ZMAX	490510	49.00	50.73	17.83
ZMAX	490520	43.47	48.11	27.60
ZMAX	490530	51.00	54.16	83.12
ZMAX	490535	56.47	57.94	16.12
ZMAX	490540	56.00	58.17	16.05
ZMAX	490550	48.00	49.28	17.52
ZMAX	490555	48.07	51.02	13.92
ZMAX	490560	49.00	49.74	16.27
ZMAX	490580	35.47	40.81	25.98
ZMAX	490590	48.37	49.31	26.27
ZMAX	490600	42.54	44.45	25.78
ZMAX	490610	39.77	41.38	27.08
ZMAX	490612	42.00	44.20	27.75
ZMAX	490620	41.70	42.88	16.80
ZMAX	490621	44.00	45.18	27.30
ZMAX	490630	42.17	44.53	20.53
ZMAX	490637	41.53	42.43	14.78
ZMAX	490638	44.12	44.50	24.82
ZMAX	490639	48.72	49.21	14.53
ZMAX	490640	37.57	40.86	25.33
ZMAX	490641	44.00	46.73	24.48
ZMAX	490642	45.16	47.24	16.32
ZMAX	490643	39.87	44.93	16.70
ZMAX	490644	47.67	49.21	14.60
ZMAX	490645	48.67	51.27	24.60
ZMAX	490646	41.53	47.31	14.48
ZMAX	490650	43.27	45.09	19.27
ZMAX	490651	48.16	50.18	16.65
ZMAX	490652	43.47	46.22	13.98
ZMAX	490654	46.00	48.13	26.82
ZMAX	490655	46.55	48.83	14.98
ZMAX	490659	45.57	48.11	14.32
ZMAX	490660	39.87	46.11	14.37
ZMAX	490661	45.57	49.72	16.63
ZMAX	490670	45.37	48.30	14.27
ZMAX	490675	41.87	48.11	14.30
ZMAX	490680	47.11	49.55	16.67
ZMAX	490690	45.49	48.39	14.18
ZMAX	490700	53.74	58.68	29.58
ZMAX	490710	47.96	52.09	27.78
ZMAX	490711	52.00	54.43	21.28
ZMAX	490720	50.00	52.14	27.97
ZMAX	490730	50.23	52.56	25.45
ZMAX	490740	49.64	53.25	17.57
ZMAX	490742	58.00	59.32	14.05
ZMAX	490743	48.76	53.27	18.00
ZMAX	490744	49.87	53.27	18.00
ZMAX	490745	57.00	59.15	29.72
ZMAX	490746	57.00	59.23	26.50
ZMAX	490750	51.30	53.51	16.03
ZMAX	490751	55.00	56.23	25.60
ZMAX	490760	50.95	53.93	20.07
ZMAX	490770	51.91	55.20	27.10
ZMAX	490771	55.00	56.06	25.68
ZMAX	490772	56.00	57.26	26.22
ZMAX	490773	56.00	58.54	25.82
ZMAX	490776	56.00	57.12	27.18
ZMAX	490779	55.00	57.10	24.95

EXISTING CONDITIONS 5-YEAR 24-HOUR

ZMAX	490780	54.21	57.06	20.42
ZMAX	490790	53.17	55.16	41.82
ZMAX	490791	56.00	57.79	27.22
ZMAX	490792	56.00	57.63	26.03
ZMAX	490794	56.00	57.24	29.38
ZMAX	490795	56.00	56.98	27.40
ZMAX	490800	53.17	55.62	14.60
ZMAX	490801	55.00	57.11	25.08
ZMAX	490802	56.00	57.35	25.72
ZMAX	490803	57.00	57.89	28.22
ZMAX	490804	56.00	57.89	27.72
ZMAX	490900	53.67	55.16	41.88
ZMAX	491010	22.06	24.94	14.25
ZMAX	491019	26.44	27.43	17.70
ZMAX	491020	26.14	28.53	16.78
ZMAX	491021	26.00	28.54	17.08
ZMAX	491022	27.07	28.53	16.93
ZMAX	491040	23.16	25.04	14.20
ZMAX	491041	26.86	29.01	13.92
ZMAX	491042	27.66	28.61	16.12
ZMAX	491043	27.17	28.39	16.33
ZMAX	491044	27.66	28.94	13.97
ZMAX	491060	25.96	28.98	116.38
ZMAX	491080	25.66	29.01	116.38
ZMAX	491100	28.96	30.31	96.63
ZMAX	491102	29.00	31.08	13.28
ZMAX	491120	27.86	30.30	78.73
ZMAX	491121	29.25	32.22	42.45
ZMAX	491122	32.00	33.30	13.50
ZMAX	491123	32.00	33.51	17.65
ZMAX	491140	29.62	32.27	42.22
ZMAX	491160	30.66	32.57	17.13
ZMAX	491180	32.00	34.31	25.73
ZMAX	491200	34.46	36.56	14.65
ZMAX	491220	36.97	38.07	19.53
ZMAX	491221	33.05	36.27	14.00
ZMAX	491222	36.80	38.34	13.12
ZMAX	491223	34.39	36.28	13.98
ZMAX	491240	31.00	32.45	27.82
ZMAX	491260	29.00	31.14	86.48
ZMAX	491280	29.00	31.31	84.15
ZMAX	491285	30.77	38.29	14.47
ZMAX	491300	29.00	31.31	84.15
ZMAX	491302	33.00	36.22	18.52
ZMAX	491320	32.90	36.23	14.03
ZMAX	491340	29.17	31.70	35.60
ZMAX	491344	36.00	37.90	27.73
ZMAX	491342	31.36	34.00	14.92
ZMAX	491360	33.97	36.54	16.25
ZMAX	491380	31.36	35.21	17.23
ZMAX	491382	33.00	33.42	14.47
ZMAX	491384	30.00	32.09	26.75
ZMAX	491387	34.17	38.94	49.48
ZMAX	491388	34.17	40.79	26.65
ZMAX	491390	36.63	38.94	49.35
ZMAX	491391	35.17	38.97	49.35
ZMAX	491393	42.00	44.71	19.67
ZMAX	491394	36.67	40.02	17.42
ZMAX	491395	35.27	38.97	49.30
ZMAX	491396	38.00	40.30	27.32
ZMAX	491397	32.07	38.93	50.23
ZMAX	491398	42.00	44.02	41.60
ZMAX	491399	38.00	40.79	26.65
ZMAX	491400	33.27	35.12	13.50
ZMAX	491401	36.77	42.20	14.83
ZMAX	491402	32.17	38.94	49.30
ZMAX	491404	38.96	40.79	27.17

EXISTING CONDITIONS 5-YEAR 24-HOUR

ZMAX	491406	36.77	40.02	17.37
ZMAX	491407	32.17	38.93	49.70
ZMAX	491392	43.00	47.25	27.48
ZMAX	491403	45.00	48.01	29.82
ZMAX	491440	38.17	39.66	27.67
ZMAX	491441	38.54	39.66	27.65
ZMAX	491460	30.71	35.80	24.70
ZMAX	491465	31.27	35.83	25.22
ZMAX	491480	33.87	36.50	13.55
ZMAX	491500	30.00	35.85	26.38
ZMAX	491501	31.17	35.84	26.03
ZMAX	491502	36.00	37.76	27.88
ZMAX	491520	38.15	40.01	13.38
ZMAX	491540	41.00	43.84	27.87
ZMAX	491541	42.00	45.46	27.55
ZMAX	491452	42.00	43.55	26.18
ZMAX	491453	37.18	39.41	13.48
ZMAX	491560	41.00	41.59	28.95
ZMAX	491561	38.00	41.35	29.92
ZMAX	491562	44.00	44.85	31.13
ZMAX	491563	39.00	41.35	29.92
ZMAX	491580	36.55	37.57	28.97
ZMAX	491600	39.73	41.37	240.00
ZMAX	491620	45.57	46.63	28.27
ZMAX	491621	48.00	50.20	27.60
ZMAX	490232	44.00	46.41	16.42
ZMAX	490431	41.00	44.07	26.53
ZMAX	490449	41.00	43.29	17.73
ZMAX	490457	39.00	40.61	22.20
ZMAX	490491	47.00	48.42	29.25
ZMAX	490492	47.00	50.25	29.27
ZMAX	490501	46.00	48.82	14.10
ZMAX	490511	48.00	49.65	28.08
ZMAX	490561	57.00	58.11	27.78
ZMAX	490581	44.00	45.94	15.03
ZMAX	490582	50.00	51.82	18.60
ZMAX	490584	50.00	51.51	26.03
ZMAX	490587	53.00	56.61	16.95
ZMAX	490701	54.00	58.55	20.10
ZMAX	490702	57.00	60.42	25.63
ZMAX	490703	53.74	55.00	14.12
ZMAX	490704	56.00	60.39	14.15
ZMAX	490713	52.00	53.82	29.12
ZMAX	490741	58.00	58.74	28.33
ZMAX	490762	56.00	58.18	27.28
ZMAX	490781	58.00	61.75	17.97
ZMAX	491274	31.22	38.40	14.72
ZMAX	491284	33.92	36.06	14.38
ZMAX	491389	39.00	40.35	27.20
ZMAX	491700	23.00	26.12	24.52
ZMAX	491701	9.70	24.05	37.10
ZMAX	491702	55.00	56.74	35.83
ZMAX	491703	25.00	27.31	18.43
ZMAX	491704	56.00	58.66	16.53
ZMAX	491705	55.80	56.74	35.83
ZMAX	491706	48.90	51.25	27.72
ZMAX	491707	45.00	46.40	30.12
ZMAX	491708	36.00	38.27	28.08
ZMAX	491709	37.00	39.09	16.23
ZMAX	491710	27.00	28.65	16.65
ZMAX	491711	24.00	25.42	40.30
ZMAX	491712	30.33	33.33	29.95
ZMAX	491713	30.00	33.34	30.13
ZMAX	491714	31.00	32.02	21.07
ZMAX	491715	40.17	41.74	25.38
ZMAX	491716	30.00	34.36	28.57
ZMAX	491717	52.00	55.10	26.70

EXISTING CONDITIONS 5-YEAR 24-HOUR

ZMAX	491718	34.00	36.29	15.75
ZMAX	491719	42.00	45.70	28.52
ZMAX	491720	38.00	40.31	16.47
ZMAX	491721	38.00	39.98	25.93
ZMAX	491722	39.00	39.57	16.95
ZMAX	491723	29.00	37.08	39.95
ZMAX	491724	29.00	34.36	28.88
ZMAX	491725	33.00	33.95	16.62
ZMAX	491728	30.00	34.61	27.77
ZMAX	491729	27.00	30.19	27.33
ZMAX	491730	26.00	29.17	22.00
ZMAX	491737	38.00	38.53	16.62
ZMAX	491740	37.00	38.49	16.32
ZMAX	491745	37.00	38.92	21.35
ZMAX	491746	37.00	38.72	28.12
ZMAX	491750	44.00	45.43	27.72
ZMAX	491753	49.00	50.77	29.85
ZMAX	490574	41.77	45.22	15.65
ZMAX	491405	42.00	44.34	28.37
ZMAX	490714	52.00	54.09	17.12
ZMAX	490753	51.00	53.78	28.50
ZMAX	491224	39.00	41.41	28.83
ZMAX	491225	41.50	43.41	14.97
ZMAX	491759	39.00	40.31	21.92
ZMAX	491760	39.00	40.27	22.13
ZMAX	491764	38.00	40.00	20.45
ZMAX	491768	38.00	39.63	22.73
ZMAX	499999	35.85	39.59	22.73
ZMAX	499998	35.80	39.58	22.72
ZMAX	499997	35.00	35.80	22.72
ZMAX	491002	30.84	33.34	30.13
ZMAX	491001	28.00	33.34	30.07
ZMAX	100000	99.00	99.00	0.00
ZMAX	100001	99.00	99.00	0.00
ZMAX	100002	99.00	99.00	0.00
ZMAX	100003	99.00	99.00	0.00
ZMAX	100004	99.00	99.00	0.00
ZMAX	100005	99.00	99.00	0.00
ZMAX	100006	99.00	99.00	0.00
ZMAX	100007	99.00	99.00	0.00
ZMAX	100008	99.00	99.00	0.00
ZMAX	100009	99.00	99.00	0.00
ZMAX	100010	99.00	99.00	0.00
ZMAX	100011	99.00	99.00	0.00
ZMAX	100012	99.00	99.00	0.00
ZMAX	100013	99.00	99.00	0.00
ZMAX	100014	99.00	99.00	0.00
ZMAX	100015	99.00	99.00	0.00
ZMAX	100016	99.00	99.00	0.00
ZMAX	100017	99.00	99.00	0.00
ZMAX	100018	99.00	99.00	0.00
ZMAX	100019	99.00	99.00	0.00
ZMAX	100020	99.00	99.00	0.00
ZMAX	100021	99.00	99.00	0.00
ZMAX	100022	99.00	99.00	0.00
ZMAX	100023	99.00	99.00	0.00
ZMAX	100024	99.00	99.00	0.00
ZMAX	100025	99.00	99.00	0.00
ZMAX	100026	99.00	99.00	0.00
ZMAX	100027	99.00	99.00	0.00
ZMAX	100028	99.00	99.00	0.00
ZMAX	100029	99.00	99.00	0.00
ZMAX	100030	99.00	99.00	0.00
ZMAX	100031	99.00	99.00	0.00
ZMAX	100032	99.00	99.00	0.00
ZMAX	100033	99.00	99.00	0.00
ZMAX	100034	99.00	99.00	0.00

EXISTING CONDITIONS 5-YEAR 24-HOUR

ZMAX	100035	99.00	99.00	0.00
ZMAX	100036	99.00	99.00	0.00
ZMAX	100037	99.00	99.00	0.00
ZMAX	100038	99.00	99.00	0.00
ZMAX	100039	99.00	99.00	0.00
ZMAX	100040	99.00	99.00	0.00
ZMAX	493010	17.00	22.66	25.45
ZMAX	493020	20.00	22.62	27.23
ZMAX	493030	18.00	24.41	13.30
ZMAX	493040	17.00	22.11	21.47
ZMAX	493060	21.00	21.45	13.35
ZMAX	493070	19.00	25.64	13.65
ZMAX	493090	18.00	22.29	25.08
ZMAX	493100	20.00	21.11	12.67
ZMAX	493110	18.00	19.93	12.95
ZMAX	493120	18.00	19.99	0.00
ZMAX	493130	17.00	20.08	13.00
ZMAX	493140	16.00	18.43	13.70
ZMAX	493150	16.00	19.33	13.83
ZMAX	493180	18.00	24.08	14.90
ZMAX	493185	19.00	23.23	18.43
ZMAX	493190	17.00	19.21	13.03
ZMAX	493195	17.00	20.06	13.65
ZMAX	493200	18.00	19.64	14.00
ZMAX	493210	18.00	19.18	13.03
ZMAX	493215	19.00	20.75	25.27
ZMAX	493220	16.00	18.96	13.32
ZMAX	493230	15.50	18.43	13.70
ZMAX	493240	16.00	19.06	14.82
ZMAX	493250	17.00	24.08	14.90
ZMAX	493260	21.00	24.08	14.97
ZMAX	493270	19.00	24.07	14.97
ZMAX	493280	19.00	23.06	13.03
ZMAX	493290	19.00	22.23	15.38
ZMAX	493310	17.00	21.71	29.07
ZMAX	493320	17.00	19.80	0.00
ZMAX	493330	17.00	19.63	14.03
ZMAX	493340	16.33	19.62	14.00
ZMAX	493350	15.50	17.69	13.17
ZMAX	493360	13.00	17.19	13.90
ZMAX	493370	14.61	17.75	13.97
ZMAX	493380	14.50	17.08	17.00
ZMAX	493390	14.50	17.86	13.77
ZMAX	493400	13.50	17.08	16.98
ZMAX	493410	12.50	17.08	16.98
ZMAX	493420	13.50	15.72	13.20
ZMAX	493430	12.44	14.74	14.33
ZMAX	493440	15.50	18.71	28.10
ZMAX	493450	18.00	18.84	14.95
ZMAX	493470	16.00	18.83	14.97
ZMAX	493480	15.50	18.84	14.95
ZMAX	493500	12.27	16.79	14.65
ZMAX	493505	12.27	16.26	17.22
ZMAX	493520	11.76	14.57	17.10
ZMAX	493525	11.00	14.46	16.92
ZMAX	493530	14.50	17.13	16.60
ZMAX	493535	15.00	17.13	16.60
ZMAX	493540	13.50	15.99	0.00
ZMAX	493545	9.65	14.41	16.95
ZMAX	493550	14.50	15.20	12.70
ZMAX	493555	13.50	14.81	12.50
ZMAX	494010	24.80	26.00	0.00
ZMAX	494020	22.90	25.55	12.93
ZMAX	494025	20.00	21.16	12.95
ZMAX	494030	22.00	22.69	13.00
ZMAX	494040	19.00	20.45	13.07
ZMAX	494045	18.70	20.44	13.07

EXISTING CONDITIONS 5-YEAR 24-HOUR

ZMAX	494050	20.00	25.00	0.00
ZMAX	494060	25.00	26.00	0.00
ZMAX	494070	18.00	19.71	13.70
ZMAX	494072	19.00	22.01	24.17
ZMAX	494074	20.00	21.05	13.12
ZMAX	494076	19.00	21.05	12.68
ZMAX	494078	21.00	22.12	12.85
ZMAX	494080	18.00	20.11	13.10
ZMAX	494100	17.00	19.06	15.18
ZMAX	494110	15.29	16.78	12.70
ZMAX	494120	18.00	19.22	13.35
ZMAX	494130	17.00	18.20	14.80
ZMAX	494140	14.50	18.19	14.82
ZMAX	494150	15.00	16.99	0.00
ZMAX	494170	18.00	19.72	13.67
ZMAX	494180	17.00	19.60	15.65
ZMAX	494185	17.00	19.56	13.80
ZMAX	494190	17.00	18.34	13.85
ZMAX	494200	15.00	16.97	0.03
ZMAX	494205	17.00	18.99	15.12
ZMAX	494210	14.87	18.80	0.00
ZMAX	494220	15.75	18.22	0.02
ZMAX	494230	16.00	18.09	0.03
ZMAX	494240	15.71	18.22	13.45
ZMAX	494250	16.70	17.98	0.00
ZMAX	495010	20.00	23.20	0.00
ZMAX	495020	15.50	18.71	28.10
ZMAX	495030	15.50	18.71	28.10
ZMAX	495035	19.00	20.34	24.98
ZMAX	495038	17.00	18.10	12.90
ZMAX	495040	16.00	18.63	12.92
ZMAX	495045	15.00	15.50	0.00
ZMAX	495050	15.50	18.34	24.92
ZMAX	495055	15.50	16.79	12.95
ZMAX	495060	14.80	15.21	0.02
ZMAX	495065	14.50	16.15	13.05
ZMAX	495070	11.50	13.32	23.57
ZMAX	495075	11.50	12.91	26.43
ZMAX	495080	13.18	13.99	0.00
ZMAX	495085	13.00	13.21	14.82
ZMAX	495090	11.42	13.21	14.82
ZMAX	495100	15.00	18.15	16.62
ZMAX	495110	14.50	17.04	12.75
ZMAX	495120	13.00	14.12	13.35
ZMAX	495125	14.42	15.96	14.05
ZMAX	495140	14.50	16.55	17.73
ZMAX	495145	14.50	16.39	240.00
ZMAX	495150	13.00	14.12	13.35
ZMAX	495152	12.50	15.08	25.55
ZMAX	495154	12.50	15.43	25.97
ZMAX	495155	12.50	15.43	25.97
ZMAX	495156	12.50	13.49	0.00
ZMAX	495160	12.50	15.34	25.58
ZMAX	495162	13.50	14.84	25.57
ZMAX	495165	13.50	15.49	25.70
ZMAX	495170	12.50	15.70	24.82
ZMAX	495180	10.45	12.41	0.00
ZMAX	495210	12.50	13.90	25.12
ZMAX	495215	12.50	14.12	13.35
ZMAX	495230	8.82	11.69	13.03
ZMAX	495235	10.50	13.33	24.80
ZMAX	495240	8.50	10.63	30.03
ZMAX	495260	13.00	15.50	23.82
ZMAX	495270	12.50	14.11	13.35
ZMAX	495275	11.50	13.10	13.50
ZMAX	495280	10.90	11.14	13.52
ZMAX	495300	13.94	15.46	14.30

EXISTING CONDITIONS 5-YEAR 24-HOUR

ZMAX	495302	13.90	15.41	14.35
ZMAX	495304	13.31	15.27	13.30
ZMAX	495306	12.73	14.11	14.57
ZMAX	495308	12.18	14.02	14.85
ZMAX	495310	11.49	12.96	13.53
ZMAX	495312	10.92	12.94	13.42
ZMAX	495314	10.43	12.92	26.42
ZMAX	495316	11.80	14.11	12.53
ZMAX	495320	9.75	12.92	26.38
ZMAX	495322	9.64	14.08	17.47
ZMAX	495324	9.44	13.88	17.78
ZMAX	495326	9.30	13.43	20.22
ZMAX	495328	9.43	13.32	23.90
ZMAX	495330	9.20	13.32	23.57
ZMAX	495332	9.02	13.32	23.90
ZMAX	495334	8.90	13.14	24.87
ZMAX	495336	8.72	12.92	26.38
ZMAX	495338	8.53	12.91	26.43
ZMAX	495340	8.40	12.91	26.57
ZMAX	495342	8.23	12.90	26.62
ZMAX	495344	8.04	12.76	26.85
ZMAX	495346	7.85	12.58	27.28
ZMAX	495348	7.66	12.32	27.67
ZMAX	495350	7.47	10.99	28.77
ZMAX	495352	7.34	10.64	29.93
ZMAX	495354	7.26	10.64	29.93
ZMAX	495356	7.19	10.60	30.08
ZMAX	496010	14.50	16.24	0.12
ZMAX	496020	14.50	18.79	0.00
ZMAX	496030	14.50	16.32	0.02
ZMAX	496060	16.60	16.75	12.83
ZMAX	496065	14.00	16.28	0.10
ZMAX	496070	14.00	16.25	0.10
ZMAX	496080	14.20	17.99	0.00
ZMAX	496090	14.00	17.99	0.00
ZMAX	496100	12.50	15.91	0.07
ZMAX	496110	11.00	15.44	14.68
ZMAX	496120	13.00	15.09	14.60
ZMAX	496125	12.00	14.10	19.67
ZMAX	496130	13.00	15.37	14.70
ZMAX	496150	14.00	15.41	14.72
ZMAX	496160	11.00	14.10	19.67
ZMAX	496170	12.00	15.43	14.70
ZMAX	496175	12.00	14.85	14.63
ZMAX	496180	11.00	13.17	14.25
ZMAX	496190	11.00	13.17	14.30
ZMAX	496200	10.50	11.31	14.30
ZMAX	496232	16.00	18.00	0.00
ZMAX	496234	14.00	16.36	0.15
ZMAX	496235	15.00	15.41	0.12
ZMAX	496240	14.28	15.85	0.03
ZMAX	496245	13.50	15.18	0.12
ZMAX	496260	13.50	15.05	0.28
ZMAX	496270	12.50	13.68	0.27
ZMAX	496280	9.50	12.15	14.28
ZMAX	496310	10.50	11.37	14.30
ZMAX	496320	10.50	11.22	14.27
ZMAX	496340	4.43	10.06	14.62
ZMAX	496350	8.50	9.88	25.07
ZMAX	496360	7.50	8.97	25.27
ZMAX	496370	6.50	8.18	14.23
ZMAX	496380	5.50	8.03	15.77
ZMAX	496390	4.41	8.10	15.68
ZMAX	496395	4.50	7.89	16.13
ZMAX	496400	6.50	8.03	15.73
ZMAX	496410	-0.65	7.89	16.13
ZMAX	496420	3.50	6.87	18.20

EXISTING CONDITIONS 5-YEAR 24-HOUR

ZMAX	496430	5.50	9.04	14.10
ZMAX	496440	5.50	7.82	27.10
ZMAX	496450	3.50	7.82	27.10
ZMAX	496460	5.50	9.98	26.00
ZMAX	496470	3.00	7.30	18.18
ZMAX	496480	6.50	8.35	25.10
ZMAX	496485	7.50	10.67	25.40
ZMAX	496490	3.50	8.27	24.98
ZMAX	496500	6.50	11.00	0.00
ZMAX	496510	4.50	7.41	25.10
ZMAX	496515	4.50	7.97	16.62
ZMAX	496520	5.50	7.30	18.20
ZMAX	496530	5.50	7.30	18.20
ZMAX	496540	6.50	7.30	18.18
ZMAX	496545	4.00	7.30	18.18
ZMAX	496550	4.00	7.30	18.18
ZMAX	496560	3.00	7.30	18.18
ZMAX	496570	5.50	7.30	18.20
ZMAX	496580	7.50	10.88	24.98
ZMAX	496590	4.50	7.89	16.13
ZMAX	496600	-1.88	7.29	18.12
ZMAX	496610	4.50	7.18	13.22
ZMAX	496620	4.50	7.17	13.23
ZMAX	497010	11.00	13.88	13.82
ZMAX	497020	3.50	10.38	30.65
ZMAX	497025	8.50	11.09	12.88
ZMAX	497035	6.50	10.20	13.87
ZMAX	497045	4.50	7.67	14.68
ZMAX	497050	3.50	7.66	14.70
ZMAX	497055	3.50	6.68	13.62
ZMAX	497065	1.88	5.09	14.30
ZMAX	497070	8.50	9.97	12.95
ZMAX	497080	2.06	6.03	0.00
ZMAX	497085	6.50	10.22	31.15
ZMAX	497086	6.32	10.60	30.08
ZMAX	497088	5.89	10.38	30.65
ZMAX	497090	4.32	10.26	31.15
ZMAX	497092	3.75	9.80	31.30
ZMAX	497094	2.75	9.34	31.40
ZMAX	497096	2.30	8.64	31.45
ZMAX	497098	1.85	8.42	31.45
ZMAX	497100	-0.16	6.88	31.20
ZMAX	497102	-1.57	6.12	30.55
ZMAX	497104	-2.19	5.85	30.00
ZMAX	497105	-1.00	5.83	29.98
ZMAX	497106	-1.37	4.80	18.98
ZMAX	497107	-2.07	4.77	18.93
ZMAX	497108	-0.37	4.75	18.92
ZMAX	497109	-4.75	4.82	18.90
ZMAX	497111	-3.66	4.76	18.82
ZMAX	497112	-3.66	4.96	18.85
ZMAX	497113	-5.33	5.21	18.83
ZMAX	497110	-0.19	7.02	25.12
ZMAX	497120	1.50	4.78	18.98
ZMAX	497122	4.50	5.42	13.18
ZMAX	497124	4.00	4.78	18.98
ZMAX	497130	-0.21	7.01	25.13
ZMAX	497140	4.00	6.50	0.00
ZMAX	497150	5.40	6.88	12.50
ZMAX	497160	-1.85	6.87	18.20
ZMAX	497161	-2.25	6.43	18.27
ZMAX	497162	-2.86	5.67	18.42
ZMAX	497170	-6.19	3.38	18.85
ZMAX	500010	6.94	10.77	12.72
ZMAX	500020	8.41	9.59	13.77
ZMAX	500025	6.13	9.70	12.83
ZMAX	500030	5.77	9.61	12.88

EXISTING CONDITIONS 5-YEAR 24-HOUR

ZMAX	500040	5.07	9.44	12.97
ZMAX	500050	4.00	8.66	31.55
ZMAX	500110	7.43	10.42	12.72
ZMAX	500120	6.16	10.25	32.32
ZMAX	500130	8.00	10.81	13.42
ZMAX	500140	6.39	10.25	32.28
ZMAX	500210	4.00	10.25	32.18
ZMAX	500220	6.91	10.84	12.57
ZMAX	500300	5.00	9.92	12.78
ZMAX	9498000	-6.69	2.96	0.00
ZMAX	9496630	12.00	12.00	0.00
ZMAX	9493020	20.00	20.00	0.00
ZMAX	9493060	22.50	22.50	0.00
ZMAX	9493190	19.00	19.00	0.00
ZMAX	9493140	19.98	19.98	0.00
ZMAX	9493150	19.70	19.70	0.00
ZMAX	9493240	19.00	19.00	0.00
ZMAX	9495030	17.48	17.48	0.00
ZMAX	9495010	23.20	23.20	0.00
ZMAX	9495085	15.10	15.10	0.00
ZMAX	9495140	16.00	16.00	0.00
ZMAX	9495145	16.00	16.00	0.00
ZMAX	9495160	15.50	15.50	0.00
ZMAX	9496320	11.00	11.00	0.00
ZMAX	9496260	14.00	14.00	0.00
ZMAX	9494250	18.00	18.00	0.00
ZMAX	9494190	18.50	18.50	0.00
ZMAX	100043	99.00	99.00	0.00
ZMAX	100044	99.00	99.00	0.00
ZMAX	100045	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100047	99.00	99.00	0.00
ZMAX	100048	99.00	99.00	0.00
ZMAX	100049	99.00	99.00	0.00
ZMAX	100050	99.00	99.00	0.00
ZMAX	100051	99.00	99.00	0.00
ZMAX	100052	99.00	99.00	0.00
ZMAX	100053	99.00	99.00	0.00
ZMAX	100054	99.00	99.00	0.00
ZMAX	100055	99.00	99.00	0.00
ZMAX	100056	99.00	99.00	0.00
ZMAX	100057	99.00	99.00	0.00
ZMAX	100058	99.00	99.00	0.00
ZMAX	100059	99.00	99.00	0.00
ZMAX	100060	99.00	99.00	0.00
ZMAX	100061	99.00	99.00	0.00
ZMAX	100062	99.00	99.00	0.00
ZMAX	100063	99.00	99.00	0.00
ZMAX	100064	99.00	99.00	0.00
ZMAX	100065	99.00	99.00	0.00
ZMAX	100066	99.00	99.00	0.00
ZMAX	100067	99.00	99.00	0.00
ZMAX	100068	99.00	99.00	0.00
ZMAX	100069	99.00	99.00	0.00
ZMAX	100070	99.00	99.00	0.00
ZMAX	100071	99.00	99.00	0.00
ZMAX	100072	99.00	99.00	0.00
ZMAX	100073	99.00	99.00	0.00
ZMAX	100074	99.00	99.00	0.00
ZMAX	100075	99.00	99.00	0.00
ZMAX	100076	99.00	99.00	0.00
ZMAX	100077	99.00	99.00	0.00
ZMAX	100078	99.00	99.00	0.00
ZMAX	100079	99.00	99.00	0.00
ZMAX	100080	99.00	99.00	0.00
ZMAX	100081	99.00	99.00	0.00

EXISTING CONDITIONS 5-YEAR 24-HOUR

ZMAX	100082	99.00	99.00	0.00
ZMAX	100083	99.00	99.00	0.00
ZMAX	100084	99.00	99.00	0.00
ZMAX	100085	99.00	99.00	0.00
ZMAX	100086	99.00	99.00	0.00
ZMAX	100087	99.00	99.00	0.00
ZMAX	100088	99.00	99.00	0.00
ZMAX	100089	99.00	99.00	0.00

Existing Conditions 25-Year 24-Hour

EXISTING CONDITIONS 25-YEAR 24-HOUR

	JUNC ID	INVT	Z_MAX	T_MAX
ZMAX	490000	24.23	28.37	45.23
ZMAX	490004	26.46	28.52	23.28
ZMAX	490002	20.93	28.37	45.22
ZMAX	490008	27.00	28.75	30.02
ZMAX	490010	26.16	28.77	27.03
ZMAX	490020	24.36	28.66	32.30
ZMAX	490030	26.46	28.67	26.00
ZMAX	490040	29.00	30.43	26.53
ZMAX	490050	25.16	28.78	15.58
ZMAX	490070	25.96	29.85	23.03
ZMAX	490071	29.00	30.10	14.08
ZMAX	490072	27.00	28.61	27.35
ZMAX	490073	30.00	32.38	13.73
ZMAX	490080	27.66	30.09	20.65
ZMAX	490090	28.00	31.09	17.40
ZMAX	490100	29.00	29.86	23.15
ZMAX	490110	26.16	30.42	21.98
ZMAX	490120	30.64	33.28	87.85
ZMAX	490130	28.96	33.31	87.83
ZMAX	490140	29.26	31.82	240.00
ZMAX	490141	31.00	32.77	26.40
ZMAX	490150	29.89	34.11	86.20
ZMAX	490160	29.77	35.55	76.17
ZMAX	490170	35.00	38.95	18.53
ZMAX	490180	32.66	38.72	29.67
ZMAX	490181	33.75	38.72	29.78
ZMAX	490200	36.66	38.92	14.87
ZMAX	490210	36.29	38.67	18.67
ZMAX	490211	39.00	40.68	15.37
ZMAX	490220	40.04	42.87	15.73
ZMAX	490221	42.00	45.25	24.38
ZMAX	490230	39.95	41.46	25.25
ZMAX	490240	26.36	31.08	20.87
ZMAX	490250	29.00	33.11	18.93
ZMAX	490251	33.00	35.73	29.92
ZMAX	490260	31.16	34.72	19.57
ZMAX	490261	34.00	36.25	13.68
ZMAX	490263	34.00	35.98	28.08
ZMAX	490264	33.00	35.25	19.08
ZMAX	490266	34.00	36.12	16.08
ZMAX	490270	35.00	38.99	14.97
ZMAX	490280	32.70	35.73	29.92
ZMAX	490281	32.70	35.73	29.90
ZMAX	490290	31.00	34.93	16.10
ZMAX	490300	31.86	34.84	17.57
ZMAX	490310	33.00	37.13	17.63
ZMAX	490320	34.00	37.98	16.77
ZMAX	490321	36.00	38.60	24.48
ZMAX	490330	37.00	38.74	15.72
ZMAX	490340	35.00	37.94	15.93
ZMAX	490350	36.00	38.77	15.67
ZMAX	490370	33.96	36.43	57.00
ZMAX	490375	35.00	38.61	54.25
ZMAX	490390	34.56	38.71	19.92
ZMAX	490391	36.80	38.00	21.57
ZMAX	490392	36.40	37.07	15.38
ZMAX	490400	37.00	39.01	16.07
ZMAX	490401	37.00	39.71	25.98
ZMAX	490410	35.46	38.61	54.18
ZMAX	490411	36.00	38.61	54.30
ZMAX	490420	35.00	40.76	48.58
ZMAX	490421	39.00	40.16	28.50
ZMAX	490422	39.00	41.18	16.93
ZMAX	490425	38.00	40.76	49.17
ZMAX	490430	35.47	41.32	28.23
ZMAX	490440	40.00	43.49	26.10

EXISTING CONDITIONS 25-YEAR 24-HOUR

ZMAX	490450	39.00	40.86	25.57
ZMAX	490451	39.00	40.57	63.08
ZMAX	490453	39.00	40.57	63.08
ZMAX	490455	39.00	40.77	18.40
ZMAX	490460	43.00	46.56	27.58
ZMAX	490470	40.00	42.50	36.27
ZMAX	490480	39.67	42.50	36.17
ZMAX	490490	40.38	42.78	21.83
ZMAX	490500	41.00	45.04	35.87
ZMAX	490510	49.00	51.19	17.32
ZMAX	490520	43.47	49.71	24.33
ZMAX	490530	51.00	54.87	82.32
ZMAX	490535	56.47	58.48	15.63
ZMAX	490540	56.00	58.76	15.58
ZMAX	490550	48.00	49.84	16.68
ZMAX	490555	48.07	52.12	13.70
ZMAX	490560	49.00	50.03	16.08
ZMAX	490580	35.47	41.48	28.00
ZMAX	490590	48.37	49.84	25.68
ZMAX	490600	42.54	44.75	15.92
ZMAX	490610	39.77	42.47	26.28
ZMAX	490612	42.00	44.27	15.28
ZMAX	490620	41.70	43.14	15.70
ZMAX	490621	44.00	45.43	18.08
ZMAX	490630	42.17	45.13	22.68
ZMAX	490637	41.53	43.06	14.32
ZMAX	490638	44.12	44.62	24.58
ZMAX	490639	48.72	49.71	15.05
ZMAX	490640	37.57	41.57	26.95
ZMAX	490641	44.00	48.12	24.27
ZMAX	490642	45.16	48.40	16.60
ZMAX	490643	39.87	45.63	16.23
ZMAX	490644	47.67	49.63	15.20
ZMAX	490645	48.67	51.72	14.87
ZMAX	490646	41.53	47.77	14.02
ZMAX	490650	43.27	45.90	17.90
ZMAX	490651	48.16	50.96	16.93
ZMAX	490652	43.47	46.34	14.20
ZMAX	490654	46.00	48.44	17.00
ZMAX	490655	46.55	48.90	14.03
ZMAX	490659	45.57	49.12	15.45
ZMAX	490660	39.87	47.60	15.55
ZMAX	490661	45.57	50.45	15.18
ZMAX	490670	45.37	49.21	15.73
ZMAX	490675	41.87	49.03	15.62
ZMAX	490680	47.11	50.23	16.72
ZMAX	490690	45.49	49.30	15.95
ZMAX	490700	53.74	59.45	29.95
ZMAX	490710	47.96	52.70	27.10
ZMAX	490711	52.00	54.53	16.28
ZMAX	490720	50.00	52.67	27.00
ZMAX	490730	50.23	53.77	26.23
ZMAX	490740	49.64	54.17	16.68
ZMAX	490742	58.00	59.70	28.00
ZMAX	490743	48.76	54.22	17.32
ZMAX	490744	49.87	54.22	17.32
ZMAX	490745	57.00	59.70	28.00
ZMAX	490746	57.00	60.23	26.48
ZMAX	490750	51.30	54.18	17.95
ZMAX	490751	55.00	56.59	25.63
ZMAX	490760	50.95	54.43	24.75
ZMAX	490770	51.91	55.55	26.07
ZMAX	490771	55.00	56.66	25.73
ZMAX	490772	56.00	57.91	26.25
ZMAX	490773	56.00	59.07	25.82
ZMAX	490776	56.00	57.62	25.05
ZMAX	490779	55.00	57.37	16.63

EXISTING CONDITIONS 25-YEAR 24-HOUR

ZMAX	490780	54.21	57.67	22.25
ZMAX	490790	53.17	55.58	28.32
ZMAX	490791	56.00	58.61	27.17
ZMAX	490792	56.00	58.35	25.97
ZMAX	490794	56.00	57.67	29.38
ZMAX	490795	56.00	57.44	27.33
ZMAX	490800	53.17	55.96	14.97
ZMAX	490801	55.00	57.44	16.42
ZMAX	490802	56.00	58.00	25.58
ZMAX	490803	57.00	58.52	27.98
ZMAX	490804	56.00	58.52	27.70
ZMAX	490900	53.67	55.58	28.42
ZMAX	491010	22.06	25.52	14.12
ZMAX	491019	26.44	27.85	18.53
ZMAX	491020	26.14	29.05	16.60
ZMAX	491021	26.00	29.05	17.78
ZMAX	491022	27.07	29.04	17.30
ZMAX	491040	23.16	25.71	14.08
ZMAX	491041	26.86	29.46	13.87
ZMAX	491042	27.66	28.87	16.80
ZMAX	491043	27.17	28.78	16.83
ZMAX	491044	27.66	29.37	13.92
ZMAX	491060	25.96	29.82	63.60
ZMAX	491080	25.66	30.05	63.60
ZMAX	491100	28.96	31.12	62.93
ZMAX	491102	29.00	31.46	13.23
ZMAX	491120	27.86	31.87	84.13
ZMAX	491121	29.25	32.32	29.87
ZMAX	491122	32.00	33.38	13.42
ZMAX	491123	32.00	33.78	17.00
ZMAX	491140	29.62	32.47	29.55
ZMAX	491160	30.66	33.39	16.55
ZMAX	491180	32.00	35.42	26.15
ZMAX	491200	34.46	37.36	15.20
ZMAX	491220	36.97	38.44	19.33
ZMAX	491221	33.05	36.58	15.85
ZMAX	491222	36.80	38.95	13.12
ZMAX	491223	34.39	36.59	15.83
ZMAX	491240	31.00	33.19	27.75
ZMAX	491260	29.00	31.91	41.52
ZMAX	491280	29.00	32.00	38.45
ZMAX	491285	30.77	39.04	14.15
ZMAX	491300	29.00	31.92	41.52
ZMAX	491302	33.00	36.56	16.10
ZMAX	491320	32.90	36.55	15.93
ZMAX	491340	29.17	32.95	42.82
ZMAX	491344	36.00	38.48	27.60
ZMAX	491342	31.36	34.15	14.47
ZMAX	491360	33.97	36.88	16.73
ZMAX	491380	31.36	35.65	16.87
ZMAX	491382	33.00	33.59	14.38
ZMAX	491384	30.00	32.34	19.10
ZMAX	491387	34.17	39.59	25.33
ZMAX	491388	34.17	41.26	23.77
ZMAX	491390	36.63	39.63	15.52
ZMAX	491391	35.17	39.68	25.27
ZMAX	491393	42.00	45.45	23.05
ZMAX	491394	36.67	40.94	15.98
ZMAX	491395	35.27	39.68	25.30
ZMAX	491396	38.00	41.23	25.05
ZMAX	491397	32.07	39.50	25.43
ZMAX	491398	42.00	44.13	19.02
ZMAX	491399	38.00	41.28	23.77
ZMAX	491400	33.27	38.16	25.80
ZMAX	491401	36.77	42.43	14.37
ZMAX	491402	32.17	39.56	25.02
ZMAX	491404	38.96	41.29	23.82

EXISTING CONDITIONS 25-YEAR 24-HOUR

ZMAX	491406	36.77	40.95	15.97
ZMAX	491407	32.17	39.52	25.22
ZMAX	491392	43.00	47.53	19.02
ZMAX	491403	45.00	48.19	18.73
ZMAX	491440	38.17	39.98	20.50
ZMAX	491441	38.54	39.98	20.45
ZMAX	491460	30.71	36.68	14.35
ZMAX	491465	31.27	36.50	25.52
ZMAX	491480	33.87	36.84	13.53
ZMAX	491500	30.00	36.55	27.15
ZMAX	491501	31.17	36.54	27.22
ZMAX	491502	36.00	38.05	24.28
ZMAX	491520	38.15	41.52	13.77
ZMAX	491540	41.00	44.22	16.58
ZMAX	491541	42.00	46.58	27.38
ZMAX	491452	42.00	44.02	19.80
ZMAX	491453	37.18	40.18	13.47
ZMAX	491560	41.00	41.97	29.05
ZMAX	491561	38.00	42.12	29.67
ZMAX	491562	44.00	45.31	30.95
ZMAX	491563	39.00	42.12	29.67
ZMAX	491580	36.55	38.25	240.00
ZMAX	491600	39.73	42.59	159.15
ZMAX	491620	45.57	47.10	27.02
ZMAX	491621	48.00	50.63	27.65
ZMAX	490232	44.00	46.68	15.08
ZMAX	490431	41.00	44.60	26.55
ZMAX	490449	41.00	43.73	16.33
ZMAX	490457	39.00	40.79	18.67
ZMAX	490491	47.00	50.31	219.30
ZMAX	490492	47.00	51.03	17.72
ZMAX	490501	46.00	49.01	13.98
ZMAX	490511	48.00	50.60	28.05
ZMAX	490561	57.00	58.80	27.85
ZMAX	490581	44.00	46.11	14.50
ZMAX	490582	50.00	52.16	14.25
ZMAX	490584	50.00	52.32	25.10
ZMAX	490587	53.00	57.25	14.03
ZMAX	490701	54.00	58.71	15.35
ZMAX	490702	57.00	60.53	15.67
ZMAX	490703	53.74	55.40	14.15
ZMAX	490704	56.00	60.69	13.47
ZMAX	490713	52.00	54.37	19.92
ZMAX	490741	58.00	59.18	28.28
ZMAX	490762	56.00	59.03	25.53
ZMAX	490781	58.00	62.09	17.28
ZMAX	491274	31.22	39.06	14.17
ZMAX	491284	33.92	36.96	14.38
ZMAX	491389	39.00	40.60	20.42
ZMAX	491700	23.00	27.53	20.18
ZMAX	491701	9.70	25.35	29.83
ZMAX	491702	55.00	57.51	32.57
ZMAX	491703	25.00	27.50	15.93
ZMAX	491704	56.00	58.78	15.47
ZMAX	491705	55.80	57.51	32.57
ZMAX	491706	48.90	51.94	27.80
ZMAX	491707	45.00	46.96	30.25
ZMAX	491708	36.00	38.59	24.65
ZMAX	491709	37.00	39.24	15.80
ZMAX	491710	27.00	28.89	15.88
ZMAX	491711	24.00	26.41	25.53
ZMAX	491712	30.33	34.47	29.73
ZMAX	491713	30.00	34.07	61.50
ZMAX	491714	31.00	32.38	17.52
ZMAX	491715	40.17	42.50	36.25
ZMAX	491716	30.00	34.88	25.02
ZMAX	491717	52.00	55.24	16.38

EXISTING CONDITIONS 25-YEAR 24-HOUR

ZMAX	491718	34.00	36.55	14.83
ZMAX	491719	42.00	46.66	28.32
ZMAX	491720	38.00	40.61	15.87
ZMAX	491721	38.00	40.53	25.87
ZMAX	491722	39.00	39.92	17.15
ZMAX	491723	29.00	37.81	56.38
ZMAX	491724	29.00	34.88	24.98
ZMAX	491725	33.00	34.40	16.27
ZMAX	491728	30.00	35.21	15.82
ZMAX	491729	27.00	31.35	24.37
ZMAX	491730	26.00	29.87	18.22
ZMAX	491737	38.00	38.64	15.87
ZMAX	491740	37.00	38.62	15.67
ZMAX	491745	37.00	39.14	17.67
ZMAX	491746	37.00	39.08	26.35
ZMAX	491750	44.00	46.32	27.67
ZMAX	491753	49.00	51.45	21.95
ZMAX	490574	41.77	46.00	16.02
ZMAX	491405	42.00	44.60	17.08
ZMAX	490714	52.00	54.56	16.50
ZMAX	490753	51.00	54.46	29.98
ZMAX	491224	39.00	42.78	28.87
ZMAX	491225	41.50	43.96	14.92
ZMAX	491759	39.00	40.68	22.40
ZMAX	491760	39.00	40.61	22.92
ZMAX	491764	38.00	40.38	24.43
ZMAX	491768	38.00	40.29	24.43
ZMAX	499999	35.85	40.24	24.45
ZMAX	499998	35.80	40.22	24.43
ZMAX	499997	35.00	36.00	24.43
ZMAX	491002	30.84	34.07	61.50
ZMAX	491001	28.00	34.07	61.23
ZMAX	100000	99.00	99.00	0.00
ZMAX	100001	99.00	99.00	0.00
ZMAX	100002	99.00	99.00	0.00
ZMAX	100003	99.00	99.00	0.00
ZMAX	100004	99.00	99.00	0.00
ZMAX	100005	99.00	99.00	0.00
ZMAX	100006	99.00	99.00	0.00
ZMAX	100007	99.00	99.00	0.00
ZMAX	100008	99.00	99.00	0.00
ZMAX	100009	99.00	99.00	0.00
ZMAX	100010	99.00	99.00	0.00
ZMAX	100011	99.00	99.00	0.00
ZMAX	100012	99.00	99.00	0.00
ZMAX	100013	99.00	99.00	0.00
ZMAX	100014	99.00	99.00	0.00
ZMAX	100015	99.00	99.00	0.00
ZMAX	100016	99.00	99.00	0.00
ZMAX	100017	99.00	99.00	0.00
ZMAX	100018	99.00	99.00	0.00
ZMAX	100019	99.00	99.00	0.00
ZMAX	100020	99.00	99.00	0.00
ZMAX	100021	99.00	99.00	0.00
ZMAX	100022	99.00	99.00	0.00
ZMAX	100023	99.00	99.00	0.00
ZMAX	100024	99.00	99.00	0.00
ZMAX	100025	99.00	99.00	0.00
ZMAX	100026	99.00	99.00	0.00
ZMAX	100027	99.00	99.00	0.00
ZMAX	100028	99.00	99.00	0.00
ZMAX	100029	99.00	99.00	0.00
ZMAX	100030	99.00	99.00	0.00
ZMAX	100031	99.00	99.00	0.00
ZMAX	100032	99.00	99.00	0.00
ZMAX	100033	99.00	99.00	0.00
ZMAX	100034	99.00	99.00	0.00

EXISTING CONDITIONS 25-YEAR 24-HOUR

ZMAX	100035	99.00	99.00	0.00
ZMAX	100036	99.00	99.00	0.00
ZMAX	100037	99.00	99.00	0.00
ZMAX	100038	99.00	99.00	0.00
ZMAX	100039	99.00	99.00	0.00
ZMAX	100040	99.00	99.00	0.00
ZMAX	493010	17.00	23.49	25.48
ZMAX	493020	20.00	23.04	18.10
ZMAX	493030	18.00	24.47	13.05
ZMAX	493040	17.00	22.33	17.12
ZMAX	493060	21.00	21.50	13.27
ZMAX	493070	19.00	26.94	13.57
ZMAX	493090	18.00	23.45	25.08
ZMAX	493100	20.00	21.15	12.67
ZMAX	493110	18.00	20.02	12.90
ZMAX	493120	18.00	19.99	0.00
ZMAX	493130	17.00	20.16	12.70
ZMAX	493140	16.00	18.79	13.38
ZMAX	493150	16.00	19.40	13.03
ZMAX	493180	18.00	24.21	14.08
ZMAX	493185	19.00	24.19	14.08
ZMAX	493190	17.00	19.35	12.98
ZMAX	493195	17.00	20.16	13.05
ZMAX	493200	18.00	19.95	46.25
ZMAX	493210	18.00	19.27	12.98
ZMAX	493215	19.00	21.01	20.03
ZMAX	493220	16.00	19.14	13.10
ZMAX	493230	15.50	18.79	13.38
ZMAX	493240	16.00	19.33	27.43
ZMAX	493250	17.00	24.21	14.08
ZMAX	493260	21.00	24.19	13.65
ZMAX	493270	19.00	24.18	13.65
ZMAX	493280	19.00	23.09	13.00
ZMAX	493290	19.00	22.29	13.02
ZMAX	493310	17.00	23.77	45.67
ZMAX	493320	17.00	19.95	46.25
ZMAX	493330	17.00	19.87	13.47
ZMAX	493340	16.33	19.90	46.27
ZMAX	493350	15.50	17.76	13.03
ZMAX	493360	13.00	18.00	0.00
ZMAX	493370	14.61	18.28	13.85
ZMAX	493380	14.50	17.52	14.83
ZMAX	493390	14.50	18.09	13.43
ZMAX	493400	13.50	17.53	14.80
ZMAX	493410	12.50	17.52	14.82
ZMAX	493420	13.50	16.29	0.03
ZMAX	493430	12.44	15.97	0.08
ZMAX	493440	15.50	19.33	27.43
ZMAX	493450	18.00	19.05	14.57
ZMAX	493470	16.00	19.05	14.58
ZMAX	493480	15.50	19.07	14.57
ZMAX	493500	12.27	17.00	14.35
ZMAX	493505	12.27	16.90	16.73
ZMAX	493520	11.76	14.97	15.90
ZMAX	493525	11.00	14.88	15.78
ZMAX	493530	14.50	17.29	13.67
ZMAX	493535	15.00	17.29	13.67
ZMAX	493540	13.50	15.99	0.00
ZMAX	493545	9.65	14.82	15.73
ZMAX	493550	14.50	15.24	12.67
ZMAX	493555	13.50	14.88	13.63
ZMAX	494010	24.80	26.00	0.00
ZMAX	494020	22.90	25.59	12.67
ZMAX	494025	20.00	21.25	12.73
ZMAX	494030	22.00	22.74	13.00
ZMAX	494040	19.00	20.56	13.03
ZMAX	494045	18.70	20.56	13.03

EXISTING CONDITIONS 25-YEAR 24-HOUR

ZMAX	494050	20.00	25.00	0.00
ZMAX	494060	25.00	26.00	0.00
ZMAX	494070	18.00	19.88	13.68
ZMAX	494072	19.00	22.07	13.53
ZMAX	494074	20.00	21.08	12.73
ZMAX	494076	19.00	21.08	12.72
ZMAX	494078	21.00	22.18	12.73
ZMAX	494080	18.00	20.17	12.83
ZMAX	494100	17.00	19.08	15.12
ZMAX	494110	15.29	17.66	14.93
ZMAX	494120	18.00	19.32	13.43
ZMAX	494130	17.00	18.47	14.57
ZMAX	494140	14.50	18.46	14.60
ZMAX	494150	15.00	17.66	14.92
ZMAX	494170	18.00	19.89	13.65
ZMAX	494180	17.00	19.64	14.57
ZMAX	494185	17.00	19.77	13.73
ZMAX	494190	17.00	18.71	13.80
ZMAX	494200	15.00	16.97	0.03
ZMAX	494205	17.00	19.05	12.60
ZMAX	494210	14.87	18.80	0.00
ZMAX	494220	15.75	18.22	0.02
ZMAX	494230	16.00	18.12	14.12
ZMAX	494240	15.71	18.39	13.38
ZMAX	494250	16.70	17.98	0.00
ZMAX	495010	20.00	23.23	12.52
ZMAX	495020	15.50	19.33	27.43
ZMAX	495030	15.50	19.33	27.43
ZMAX	495035	19.00	21.09	24.97
ZMAX	495038	17.00	18.17	12.78
ZMAX	495040	16.00	18.70	12.88
ZMAX	495045	15.00	15.88	12.68
ZMAX	495050	15.50	18.89	24.92
ZMAX	495055	15.50	16.83	12.57
ZMAX	495060	14.80	15.87	12.70
ZMAX	495065	14.50	16.26	12.57
ZMAX	495070	11.50	13.92	17.85
ZMAX	495075	11.50	13.54	22.33
ZMAX	495080	13.18	13.99	0.00
ZMAX	495085	13.00	15.04	17.12
ZMAX	495090	11.42	13.57	21.78
ZMAX	495100	15.00	18.47	14.75
ZMAX	495110	14.50	17.09	12.50
ZMAX	495120	13.00	14.23	12.92
ZMAX	495125	14.42	16.27	14.58
ZMAX	495140	14.50	16.81	26.47
ZMAX	495145	14.50	16.81	26.47
ZMAX	495150	13.00	14.24	12.92
ZMAX	495152	12.50	16.09	25.52
ZMAX	495154	12.50	16.02	19.38
ZMAX	495155	12.50	16.02	19.38
ZMAX	495156	12.50	13.49	0.00
ZMAX	495160	12.50	16.03	24.87
ZMAX	495162	13.50	15.57	25.52
ZMAX	495165	13.50	16.01	17.57
ZMAX	495170	12.50	15.75	13.55
ZMAX	495180	10.45	12.88	23.12
ZMAX	495210	12.50	14.68	25.08
ZMAX	495215	12.50	14.23	12.93
ZMAX	495230	8.82	12.33	13.10
ZMAX	495235	10.50	13.88	24.82
ZMAX	495240	8.50	11.23	24.45
ZMAX	495260	13.00	16.05	24.57
ZMAX	495270	12.50	14.22	12.93
ZMAX	495275	11.50	13.22	12.92
ZMAX	495280	10.90	11.27	12.97
ZMAX	495300	13.94	15.71	13.67

EXISTING CONDITIONS 25-YEAR 24-HOUR

ZMAX	495302	13.90	15.67	13.55
ZMAX	495304	13.31	15.60	13.22
ZMAX	495306	12.73	14.39	13.88
ZMAX	495308	12.18	14.26	14.23
ZMAX	495310	11.49	13.56	21.88
ZMAX	495312	10.92	13.56	22.00
ZMAX	495314	10.43	13.55	22.18
ZMAX	495316	11.80	14.15	12.53
ZMAX	495320	9.75	13.55	22.20
ZMAX	495322	9.64	14.74	15.77
ZMAX	495324	9.44	14.48	16.05
ZMAX	495326	9.30	14.05	17.23
ZMAX	495328	9.43	13.92	17.83
ZMAX	495330	9.20	13.92	17.85
ZMAX	495332	9.02	13.92	17.82
ZMAX	495334	8.90	13.70	20.40
ZMAX	495336	8.72	13.55	22.23
ZMAX	495338	8.53	13.54	22.33
ZMAX	495340	8.40	13.53	22.33
ZMAX	495342	8.23	13.52	22.42
ZMAX	495344	8.04	13.37	22.70
ZMAX	495346	7.85	13.24	22.88
ZMAX	495348	7.66	12.88	23.12
ZMAX	495350	7.47	11.59	23.98
ZMAX	495352	7.34	11.25	24.43
ZMAX	495354	7.26	11.24	24.43
ZMAX	495356	7.19	11.18	24.47
ZMAX	496010	14.50	16.27	14.60
ZMAX	496020	14.50	18.79	0.00
ZMAX	496030	14.50	16.32	0.02
ZMAX	496060	16.60	16.77	12.83
ZMAX	496065	14.00	16.28	0.10
ZMAX	496070	14.00	16.25	0.10
ZMAX	496080	14.20	17.99	0.00
ZMAX	496090	14.00	17.99	0.00
ZMAX	496100	12.50	15.91	0.07
ZMAX	496110	11.00	15.73	14.87
ZMAX	496120	13.00	15.31	13.30
ZMAX	496125	12.00	15.18	20.48
ZMAX	496130	13.00	15.61	14.93
ZMAX	496150	14.00	15.69	14.90
ZMAX	496160	11.00	15.18	20.48
ZMAX	496170	12.00	15.72	14.88
ZMAX	496175	12.00	14.94	14.92
ZMAX	496180	11.00	13.28	13.00
ZMAX	496190	11.00	13.27	13.00
ZMAX	496200	10.50	11.93	15.67
ZMAX	496232	16.00	18.00	0.00
ZMAX	496234	14.00	16.36	0.15
ZMAX	496235	15.00	15.41	0.12
ZMAX	496240	14.28	15.85	0.03
ZMAX	496245	13.50	15.22	13.67
ZMAX	496260	13.50	15.17	13.67
ZMAX	496270	12.50	13.85	13.57
ZMAX	496280	9.50	12.33	13.90
ZMAX	496310	10.50	11.92	15.68
ZMAX	496320	10.50	11.90	15.72
ZMAX	496340	4.43	11.88	15.70
ZMAX	496350	8.50	10.59	25.02
ZMAX	496360	7.50	9.08	13.68
ZMAX	496370	6.50	8.66	17.55
ZMAX	496380	5.50	8.65	17.53
ZMAX	496390	4.41	8.73	17.38
ZMAX	496395	4.50	8.47	17.97
ZMAX	496400	6.50	8.65	17.52
ZMAX	496410	-0.65	8.47	17.97
ZMAX	496420	3.50	8.23	19.00

EXISTING CONDITIONS 25-YEAR 24-HOUR

ZMAX	496430	5.50	9.18	12.98
ZMAX	496440	5.50	8.27	19.27
ZMAX	496450	3.50	8.27	19.27
ZMAX	496460	5.50	10.10	14.18
ZMAX	496470	3.00	8.27	19.27
ZMAX	496480	6.50	10.06	15.08
ZMAX	496485	7.50	11.00	16.52
ZMAX	496490	3.50	9.02	20.33
ZMAX	496500	6.50	11.00	0.00
ZMAX	496510	4.50	8.50	240.00
ZMAX	496515	4.50	8.27	19.27
ZMAX	496520	5.50	8.27	19.27
ZMAX	496530	5.50	8.27	19.28
ZMAX	496540	6.50	8.27	19.27
ZMAX	496545	4.00	8.27	19.27
ZMAX	496550	4.00	8.27	19.25
ZMAX	496560	3.00	8.27	19.25
ZMAX	496570	5.50	8.25	19.25
ZMAX	496580	7.50	11.01	13.97
ZMAX	496590	4.50	8.47	17.97
ZMAX	496600	-1.88	8.27	19.17
ZMAX	496610	4.50	8.20	19.15
ZMAX	496620	4.50	8.19	19.13
ZMAX	497010	11.00	13.93	13.30
ZMAX	497020	3.50	10.91	24.58
ZMAX	497025	8.50	11.15	12.73
ZMAX	497035	6.50	10.48	13.15
ZMAX	497045	4.50	8.02	23.52
ZMAX	497050	3.50	8.01	23.48
ZMAX	497055	3.50	7.01	21.93
ZMAX	497065	1.88	7.01	21.92
ZMAX	497070	8.50	10.07	12.88
ZMAX	497080	2.06	7.32	19.68
ZMAX	497085	6.50	10.68	24.62
ZMAX	497086	6.32	11.18	24.47
ZMAX	497088	5.89	10.90	24.58
ZMAX	497090	4.32	10.80	24.62
ZMAX	497092	3.75	10.57	24.65
ZMAX	497094	2.75	10.15	24.65
ZMAX	497096	2.30	9.22	24.60
ZMAX	497098	1.85	8.91	24.60
ZMAX	497100	-0.16	7.98	23.27
ZMAX	497102	-1.57	7.77	20.68
ZMAX	497104	-2.19	7.66	20.32
ZMAX	497105	-1.00	7.64	20.25
ZMAX	497106	-1.37	7.30	19.63
ZMAX	497107	-2.07	7.29	19.62
ZMAX	497108	-0.37	7.26	19.62
ZMAX	497109	-4.75	7.28	19.62
ZMAX	497111	-3.66	7.28	19.62
ZMAX	497112	-3.66	7.19	19.62
ZMAX	497113	-5.33	7.08	19.62
ZMAX	497110	-0.19	8.28	18.83
ZMAX	497120	1.50	7.29	19.63
ZMAX	497122	4.50	7.29	19.65
ZMAX	497124	4.00	7.29	19.63
ZMAX	497130	-0.21	8.14	18.12
ZMAX	497140	4.00	7.31	19.68
ZMAX	497150	5.40	7.28	19.62
ZMAX	497160	-1.85	8.17	19.08
ZMAX	497161	-2.25	7.94	19.25
ZMAX	497162	-2.86	7.48	19.52
ZMAX	497170	-6.19	4.25	19.67
ZMAX	500010	6.94	11.25	12.75
ZMAX	500020	8.41	10.31	14.30
ZMAX	500025	6.13	11.05	12.97
ZMAX	500030	5.77	11.04	12.97

EXISTING CONDITIONS 25-YEAR 24-HOUR

ZMAX	500040	5.07	10.55	13.05
ZMAX	500050	4.00	9.24	24.50
ZMAX	500110	7.43	11.26	12.82
ZMAX	500120	6.16	10.80	24.62
ZMAX	500130	8.00	11.90	13.60
ZMAX	500140	6.39	10.81	24.73
ZMAX	500210	4.00	10.82	24.68
ZMAX	500220	6.91	11.27	12.73
ZMAX	500300	5.00	10.08	12.68
ZMAX	9498000	-6.69	2.96	0.00
ZMAX	9496630	12.00	12.00	0.00
ZMAX	9493020	20.00	20.00	0.00
ZMAX	9493060	22.50	22.50	0.00
ZMAX	9493190	19.00	19.00	0.00
ZMAX	9493140	19.98	19.98	0.00
ZMAX	9493150	19.70	19.70	0.00
ZMAX	9493240	19.00	19.00	0.00
ZMAX	9495030	17.48	17.48	0.00
ZMAX	9495010	23.20	23.20	0.00
ZMAX	9495085	15.10	15.10	0.00
ZMAX	9495140	16.00	16.00	0.00
ZMAX	9495145	16.00	16.00	0.00
ZMAX	9495160	15.50	15.50	0.00
ZMAX	9496320	11.00	11.00	0.00
ZMAX	9496260	14.00	14.00	0.00
ZMAX	9494250	18.00	18.00	0.00
ZMAX	9494190	18.50	18.50	0.00
ZMAX	100043	99.00	99.00	0.00
ZMAX	100044	99.00	99.00	0.00
ZMAX	100045	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100047	99.00	99.00	0.00
ZMAX	100048	99.00	99.00	0.00
ZMAX	100049	99.00	99.00	0.00
ZMAX	100050	99.00	99.00	0.00
ZMAX	100051	99.00	99.00	0.00
ZMAX	100052	99.00	99.00	0.00
ZMAX	100053	99.00	99.00	0.00
ZMAX	100054	99.00	99.00	0.00
ZMAX	100055	99.00	99.00	0.00
ZMAX	100056	99.00	99.00	0.00
ZMAX	100057	99.00	99.00	0.00
ZMAX	100058	99.00	99.00	0.00
ZMAX	100059	99.00	99.00	0.00
ZMAX	100060	99.00	99.00	0.00
ZMAX	100061	99.00	99.00	0.00
ZMAX	100062	99.00	99.00	0.00
ZMAX	100063	99.00	99.00	0.00
ZMAX	100064	99.00	99.00	0.00
ZMAX	100065	99.00	99.00	0.00
ZMAX	100066	99.00	99.00	0.00
ZMAX	100067	99.00	99.00	0.00
ZMAX	100068	99.00	99.00	0.00
ZMAX	100069	99.00	99.00	0.00
ZMAX	100070	99.00	99.00	0.00
ZMAX	100071	99.00	99.00	0.00
ZMAX	100072	99.00	99.00	0.00
ZMAX	100073	99.00	99.00	0.00
ZMAX	100074	99.00	99.00	0.00
ZMAX	100075	99.00	99.00	0.00
ZMAX	100076	99.00	99.00	0.00
ZMAX	100077	99.00	99.00	0.00
ZMAX	100078	99.00	99.00	0.00
ZMAX	100079	99.00	99.00	0.00
ZMAX	100080	99.00	99.00	0.00
ZMAX	100081	99.00	99.00	0.00

EXISTING CONDITIONS 25-YEAR 24-HOUR

ZMAX	100082	99.00	99.00	0.00
ZMAX	100083	99.00	99.00	0.00
ZMAX	100084	99.00	99.00	0.00
ZMAX	100085	99.00	99.00	0.00
ZMAX	100086	99.00	99.00	0.00
ZMAX	100087	99.00	99.00	0.00
ZMAX	100088	99.00	99.00	0.00
ZMAX	100089	99.00	99.00	0.00

Existing Conditions 100-Year 24-Hour

EXISTING CONDITIONS 100-YEAR 24-HOUR

	JUNC ID	INVT	Z_MAX	T_MAX
ZMAX	490000	24.23	28.35	144.72
ZMAX	490004	26.46	29.38	20.95
ZMAX	490002	20.93	28.35	171.85
ZMAX	490008	27.00	29.57	29.85
ZMAX	490010	26.16	29.30	93.72
ZMAX	490020	24.36	29.30	93.72
ZMAX	490030	26.46	29.46	80.88
ZMAX	490040	29.00	31.11	26.48
ZMAX	490050	25.16	29.11	15.37
ZMAX	490070	25.96	30.71	20.78
ZMAX	490071	29.00	30.71	20.85
ZMAX	490072	27.00	29.36	27.30
ZMAX	490073	30.00	32.44	13.55
ZMAX	490080	27.66	31.47	18.30
ZMAX	490090	28.00	31.51	18.15
ZMAX	490100	29.00	30.71	20.85
ZMAX	490110	26.16	31.36	20.08
ZMAX	490120	30.64	33.72	45.80
ZMAX	490130	28.96	33.90	45.57
ZMAX	490140	29.26	32.16	240.00
ZMAX	490141	31.00	33.50	26.33
ZMAX	490150	29.89	35.84	44.72
ZMAX	490160	29.77	36.09	36.20
ZMAX	490170	35.00	39.20	15.85
ZMAX	490180	32.66	39.44	24.80
ZMAX	490181	33.75	39.44	24.83
ZMAX	490200	36.66	39.40	24.82
ZMAX	490210	36.29	39.17	18.43
ZMAX	490211	39.00	40.77	17.17
ZMAX	490220	40.04	43.14	14.83
ZMAX	490221	42.00	45.37	17.35
ZMAX	490230	39.95	42.07	24.65
ZMAX	490240	26.36	32.15	19.27
ZMAX	490250	29.00	33.78	17.77
ZMAX	490251	33.00	36.24	20.83
ZMAX	490260	31.16	35.04	16.32
ZMAX	490261	34.00	36.42	13.65
ZMAX	490263	34.00	36.83	28.03
ZMAX	490264	33.00	35.73	17.52
ZMAX	490266	34.00	36.44	15.72
ZMAX	490270	35.00	39.70	15.50
ZMAX	490280	32.70	36.25	20.83
ZMAX	490281	32.70	36.26	20.77
ZMAX	490290	31.00	35.46	17.45
ZMAX	490300	31.86	35.19	16.10
ZMAX	490310	33.00	37.57	16.27
ZMAX	490320	34.00	38.25	16.10
ZMAX	490321	36.00	38.91	20.47
ZMAX	490330	37.00	38.81	14.47
ZMAX	490340	35.00	38.09	14.82
ZMAX	490350	36.00	38.86	14.55
ZMAX	490370	33.96	36.98	59.80
ZMAX	490375	35.00	39.21	58.43
ZMAX	490390	34.56	39.16	18.40
ZMAX	490391	36.80	38.41	19.87
ZMAX	490392	36.40	37.34	15.35
ZMAX	490400	37.00	39.20	58.43
ZMAX	490401	37.00	40.02	24.67
ZMAX	490410	35.46	39.21	58.42
ZMAX	490411	36.00	39.21	58.42
ZMAX	490420	35.00	41.34	54.37
ZMAX	490421	39.00	41.33	63.18
ZMAX	490422	39.00	41.34	16.03
ZMAX	490425	38.00	41.34	54.58
ZMAX	490430	35.47	42.33	41.03
ZMAX	490440	40.00	44.20	26.00

EXISTING CONDITIONS 100-YEAR 24-HOUR

ZMAX	490450	39.00	41.19	22.35
ZMAX	490451	39.00	41.33	57.18
ZMAX	490453	39.00	41.33	57.18
ZMAX	490455	39.00	41.10	20.75
ZMAX	490460	43.00	47.39	27.40
ZMAX	490470	40.00	43.41	26.63
ZMAX	490480	39.67	43.41	26.63
ZMAX	490490	40.38	44.05	32.98
ZMAX	490500	41.00	45.24	23.28
ZMAX	490510	49.00	51.73	17.57
ZMAX	490520	43.47	50.41	25.00
ZMAX	490530	51.00	55.56	35.80
ZMAX	490535	56.47	58.99	15.53
ZMAX	490540	56.00	59.33	15.50
ZMAX	490550	48.00	50.46	25.02
ZMAX	490555	48.07	52.97	13.53
ZMAX	490560	49.00	50.47	25.08
ZMAX	490580	35.47	42.56	40.80
ZMAX	490590	48.37	50.48	25.30
ZMAX	490600	42.54	44.89	14.72
ZMAX	490610	39.77	43.62	26.15
ZMAX	490612	42.00	44.39	14.68
ZMAX	490620	41.70	43.63	26.18
ZMAX	490621	44.00	45.53	14.70
ZMAX	490630	42.17	45.58	17.52
ZMAX	490637	41.53	44.37	14.03
ZMAX	490638	44.12	45.26	15.63
ZMAX	490639	48.72	51.04	15.40
ZMAX	490640	37.57	42.67	38.18
ZMAX	490641	44.00	49.24	15.23
ZMAX	490642	45.16	49.36	17.32
ZMAX	490643	39.87	46.39	24.90
ZMAX	490644	47.67	50.97	15.80
ZMAX	490645	48.67	52.40	14.18
ZMAX	490646	41.53	48.12	13.57
ZMAX	490650	43.27	46.59	17.00
ZMAX	490651	48.16	51.83	17.22
ZMAX	490652	43.47	46.60	16.97
ZMAX	490654	46.00	48.54	14.23
ZMAX	490655	46.55	48.97	13.72
ZMAX	490659	45.57	50.78	28.83
ZMAX	490660	39.87	49.06	28.03
ZMAX	490661	45.57	51.10	14.57
ZMAX	490670	45.37	51.07	28.80
ZMAX	490675	41.87	50.78	28.92
ZMAX	490680	47.11	51.14	16.45
ZMAX	490690	45.49	51.28	28.55
ZMAX	490700	53.74	60.32	29.87
ZMAX	490710	47.96	53.50	26.42
ZMAX	490711	52.00	54.65	15.20
ZMAX	490720	50.00	53.35	25.68
ZMAX	490730	50.23	54.44	19.13
ZMAX	490740	49.64	55.35	17.08
ZMAX	490742	58.00	60.25	26.32
ZMAX	490743	48.76	55.43	18.22
ZMAX	490744	49.87	55.43	18.20
ZMAX	490745	57.00	60.25	26.32
ZMAX	490746	57.00	60.68	18.72
ZMAX	490750	51.30	54.86	21.20
ZMAX	490751	55.00	57.03	25.60
ZMAX	490760	50.95	54.83	24.28
ZMAX	490770	51.91	55.83	24.28
ZMAX	490771	55.00	57.10	19.42
ZMAX	490772	56.00	58.66	26.20
ZMAX	490773	56.00	59.60	25.85
ZMAX	490776	56.00	57.70	15.15
ZMAX	490779	55.00	57.71	16.05

EXISTING CONDITIONS 100-YEAR 24-HOUR

ZMAX	490780	54.21	58.38	24.02
ZMAX	490790	53.17	56.12	28.82
ZMAX	490791	56.00	59.15	19.57
ZMAX	490792	56.00	59.07	25.98
ZMAX	490794	56.00	58.05	27.17
ZMAX	490795	56.00	58.04	24.42
ZMAX	490800	53.17	56.77	18.30
ZMAX	490801	55.00	57.91	15.73
ZMAX	490802	56.00	58.16	15.15
ZMAX	490803	57.00	59.24	27.88
ZMAX	490804	56.00	59.24	27.88
ZMAX	490900	53.67	56.12	28.80
ZMAX	491010	22.06	26.04	15.52
ZMAX	491019	26.44	29.01	16.73
ZMAX	491020	26.14	29.45	16.17
ZMAX	491021	26.00	29.44	17.92
ZMAX	491022	27.07	29.43	17.17
ZMAX	491040	23.16	26.59	15.30
ZMAX	491041	26.86	29.91	14.05
ZMAX	491042	27.66	29.23	17.53
ZMAX	491043	27.17	29.14	17.55
ZMAX	491044	27.66	29.85	14.12
ZMAX	491060	25.96	30.03	24.93
ZMAX	491080	25.66	30.82	56.75
ZMAX	491100	28.96	32.11	52.75
ZMAX	491102	29.00	32.11	52.83
ZMAX	491120	27.86	32.67	53.63
ZMAX	491121	29.25	32.70	52.37
ZMAX	491122	32.00	33.47	13.38
ZMAX	491123	32.00	34.06	16.67
ZMAX	491140	29.62	32.87	26.33
ZMAX	491160	30.66	34.29	16.77
ZMAX	491180	32.00	36.48	25.25
ZMAX	491200	34.46	38.28	15.60
ZMAX	491220	36.97	38.93	21.72
ZMAX	491221	33.05	36.94	14.72
ZMAX	491222	36.80	39.87	13.20
ZMAX	491223	34.39	36.95	14.72
ZMAX	491240	31.00	33.84	24.65
ZMAX	491260	29.00	32.90	39.47
ZMAX	491280	29.00	33.00	38.05
ZMAX	491285	30.77	39.29	13.68
ZMAX	491300	29.00	32.91	39.47
ZMAX	491302	33.00	36.93	14.73
ZMAX	491320	32.90	36.89	14.75
ZMAX	491340	29.17	34.24	44.13
ZMAX	491344	36.00	39.09	27.65
ZMAX	491342	31.36	34.47	16.05
ZMAX	491360	33.97	37.17	16.42
ZMAX	491380	31.36	35.94	16.22
ZMAX	491382	33.00	33.78	14.35
ZMAX	491384	30.00	32.67	17.27
ZMAX	491387	34.17	40.27	21.45
ZMAX	491388	34.17	41.67	17.68
ZMAX	491390	36.63	40.57	15.95
ZMAX	491391	35.17	40.39	21.50
ZMAX	491393	42.00	45.71	16.28
ZMAX	491394	36.67	42.02	16.48
ZMAX	491395	35.27	40.39	21.43
ZMAX	491396	38.00	41.60	18.75
ZMAX	491397	32.07	40.05	21.23
ZMAX	491398	42.00	44.39	15.83
ZMAX	491399	38.00	41.75	17.68
ZMAX	491400	33.27	38.92	21.07
ZMAX	491401	36.77	42.93	16.53
ZMAX	491402	32.17	40.33	20.03
ZMAX	491404	38.96	41.75	17.80

EXISTING CONDITIONS 100-YEAR 24-HOUR

ZMAX	491406	36.77	42.26	16.55
ZMAX	491407	32.17	40.24	20.37
ZMAX	491392	43.00	47.62	15.23
ZMAX	491403	45.00	48.37	17.28
ZMAX	491440	38.17	40.45	21.52
ZMAX	491441	38.54	40.45	21.53
ZMAX	491460	30.71	37.39	13.88
ZMAX	491465	31.27	37.10	25.43
ZMAX	491480	33.87	37.16	13.33
ZMAX	491500	30.00	37.32	26.78
ZMAX	491501	31.17	37.29	27.00
ZMAX	491502	36.00	38.18	16.10
ZMAX	491520	38.15	41.81	13.37
ZMAX	491540	41.00	44.55	15.25
ZMAX	491541	42.00	47.47	27.35
ZMAX	491452	42.00	44.10	13.90
ZMAX	491453	37.18	40.98	13.52
ZMAX	491560	41.00	42.45	28.92
ZMAX	491561	38.00	42.49	19.28
ZMAX	491562	44.00	45.83	31.03
ZMAX	491563	39.00	42.49	19.30
ZMAX	491580	36.55	39.59	240.00
ZMAX	491600	39.73	42.81	25.22
ZMAX	491620	45.57	47.61	26.12
ZMAX	491621	48.00	51.05	25.88
ZMAX	490232	44.00	46.93	14.48
ZMAX	490431	41.00	44.88	19.73
ZMAX	490449	41.00	44.15	15.65
ZMAX	490457	39.00	41.12	20.75
ZMAX	490491	47.00	51.30	26.33
ZMAX	490492	47.00	51.40	15.78
ZMAX	490501	46.00	49.23	13.88
ZMAX	490511	48.00	51.64	28.05
ZMAX	490561	57.00	59.59	27.75
ZMAX	490581	44.00	46.30	14.27
ZMAX	490582	50.00	52.53	13.85
ZMAX	490584	50.00	52.46	14.50
ZMAX	490587	53.00	57.82	13.62
ZMAX	490701	54.00	58.83	14.45
ZMAX	490702	57.00	60.65	14.62
ZMAX	490703	53.74	55.90	14.30
ZMAX	490704	56.00	60.92	13.23
ZMAX	490713	52.00	54.64	16.30
ZMAX	490741	58.00	59.99	240.00
ZMAX	490762	56.00	59.34	17.98
ZMAX	490781	58.00	62.43	16.87
ZMAX	491274	31.22	39.32	13.70
ZMAX	491284	33.92	37.64	13.92
ZMAX	491389	39.00	40.79	15.42
ZMAX	491700	23.00	28.68	18.30
ZMAX	491701	9.70	27.24	27.10
ZMAX	491702	55.00	58.01	24.62
ZMAX	491703	25.00	27.78	18.37
ZMAX	491704	56.00	58.91	15.03
ZMAX	491705	55.80	58.04	24.38
ZMAX	491706	48.90	52.64	25.65
ZMAX	491707	45.00	47.64	30.08
ZMAX	491708	36.00	38.89	20.03
ZMAX	491709	37.00	39.42	16.45
ZMAX	491710	27.00	29.28	14.85
ZMAX	491711	24.00	27.24	27.27
ZMAX	491712	30.33	35.69	240.00
ZMAX	491713	30.00	35.70	240.00
ZMAX	491714	31.00	32.75	16.77
ZMAX	491715	40.17	43.41	26.60
ZMAX	491716	30.00	35.70	240.00
ZMAX	491717	52.00	55.33	14.42

EXISTING CONDITIONS 100-YEAR 24-HOUR

ZMAX	491718	34.00	36.79	14.37
ZMAX	491719	42.00	47.61	28.35
ZMAX	491720	38.00	40.87	15.38
ZMAX	491721	38.00	41.02	25.88
ZMAX	491722	39.00	40.44	17.55
ZMAX	491723	29.00	38.54	42.83
ZMAX	491724	29.00	35.70	240.00
ZMAX	491725	33.00	35.70	240.00
ZMAX	491728	30.00	35.37	14.33
ZMAX	491729	27.00	31.52	15.05
ZMAX	491730	26.00	30.63	17.33
ZMAX	491737	38.00	38.88	19.98
ZMAX	491740	37.00	38.74	15.28
ZMAX	491745	37.00	39.38	17.00
ZMAX	491746	37.00	39.29	20.38
ZMAX	491750	44.00	47.43	27.72
ZMAX	491753	49.00	51.85	25.73
ZMAX	490574	41.77	46.90	16.47
ZMAX	491405	42.00	44.75	15.43
ZMAX	490714	52.00	54.66	15.23
ZMAX	490753	51.00	54.87	21.25
ZMAX	491224	39.00	43.54	18.37
ZMAX	491225	41.50	44.44	14.95
ZMAX	491759	39.00	41.07	20.90
ZMAX	491760	39.00	40.98	21.50
ZMAX	491764	38.00	40.77	23.95
ZMAX	491768	38.00	40.69	23.95
ZMAX	499999	35.85	40.64	23.95
ZMAX	499998	35.80	40.61	23.97
ZMAX	499997	35.00	36.15	24.00
ZMAX	491002	30.84	35.70	240.00
ZMAX	491001	28.00	35.70	240.00
ZMAX	100000	99.00	99.00	0.00
ZMAX	100001	99.00	99.00	0.00
ZMAX	100002	99.00	99.00	0.00
ZMAX	100003	99.00	99.00	0.00
ZMAX	100004	99.00	99.00	0.00
ZMAX	100005	99.00	99.00	0.00
ZMAX	100006	99.00	99.00	0.00
ZMAX	100007	99.00	99.00	0.00
ZMAX	100008	99.00	99.00	0.00
ZMAX	100009	99.00	99.00	0.00
ZMAX	100010	99.00	99.00	0.00
ZMAX	100011	99.00	99.00	0.00
ZMAX	100012	99.00	99.00	0.00
ZMAX	100013	99.00	99.00	0.00
ZMAX	100014	99.00	99.00	0.00
ZMAX	100015	99.00	99.00	0.00
ZMAX	100016	99.00	99.00	0.00
ZMAX	100017	99.00	99.00	0.00
ZMAX	100018	99.00	99.00	0.00
ZMAX	100019	99.00	99.00	0.00
ZMAX	100020	99.00	99.00	0.00
ZMAX	100021	99.00	99.00	0.00
ZMAX	100022	99.00	99.00	0.00
ZMAX	100023	99.00	99.00	0.00
ZMAX	100024	99.00	99.00	0.00
ZMAX	100025	99.00	99.00	0.00
ZMAX	100026	99.00	99.00	0.00
ZMAX	100027	99.00	99.00	0.00
ZMAX	100028	99.00	99.00	0.00
ZMAX	100029	99.00	99.00	0.00
ZMAX	100030	99.00	99.00	0.00
ZMAX	100031	99.00	99.00	0.00
ZMAX	100032	99.00	99.00	0.00
ZMAX	100033	99.00	99.00	0.00
ZMAX	100034	99.00	99.00	0.00

EXISTING CONDITIONS 100-YEAR 24-HOUR

ZMAX	100035	99.00	99.00	0.00
ZMAX	100036	99.00	99.00	0.00
ZMAX	100037	99.00	99.00	0.00
ZMAX	100038	99.00	99.00	0.00
ZMAX	100039	99.00	99.00	0.00
ZMAX	100040	99.00	99.00	0.00
ZMAX	493010	17.00	24.24	25.48
ZMAX	493020	20.00	23.14	14.77
ZMAX	493030	18.00	24.51	13.00
ZMAX	493040	17.00	22.48	15.53
ZMAX	493060	21.00	21.64	14.72
ZMAX	493070	19.00	27.04	12.87
ZMAX	493090	18.00	23.83	16.47
ZMAX	493100	20.00	21.20	12.67
ZMAX	493110	18.00	20.10	12.88
ZMAX	493120	18.00	19.99	0.00
ZMAX	493130	17.00	20.21	12.67
ZMAX	493140	16.00	19.05	13.32
ZMAX	493150	16.00	19.52	18.45
ZMAX	493180	18.00	24.39	13.47
ZMAX	493185	19.00	24.36	13.47
ZMAX	493190	17.00	19.48	12.87
ZMAX	493195	17.00	20.22	12.85
ZMAX	493200	18.00	20.18	14.47
ZMAX	493210	18.00	19.36	13.00
ZMAX	493215	19.00	21.05	13.57
ZMAX	493220	16.00	19.28	13.07
ZMAX	493230	15.50	19.04	13.32
ZMAX	493240	16.00	19.52	18.45
ZMAX	493250	17.00	24.39	13.48
ZMAX	493260	21.00	24.35	13.48
ZMAX	493270	19.00	24.32	13.48
ZMAX	493280	19.00	23.11	13.00
ZMAX	493290	19.00	22.32	12.73
ZMAX	493310	17.00	23.75	145.15
ZMAX	493320	17.00	20.15	14.47
ZMAX	493330	17.00	20.15	13.67
ZMAX	493340	16.33	20.09	14.45
ZMAX	493350	15.50	17.81	13.02
ZMAX	493360	13.00	18.00	0.00
ZMAX	493370	14.61	18.48	13.65
ZMAX	493380	14.50	17.84	14.38
ZMAX	493390	14.50	18.22	13.35
ZMAX	493400	13.50	17.86	14.37
ZMAX	493410	12.50	17.85	14.38
ZMAX	493420	13.50	16.29	0.03
ZMAX	493430	12.44	15.97	0.08
ZMAX	493440	15.50	19.52	18.42
ZMAX	493450	18.00	19.29	14.48
ZMAX	493470	16.00	19.28	14.50
ZMAX	493480	15.50	19.34	14.50
ZMAX	493500	12.27	17.18	15.60
ZMAX	493505	12.27	17.09	15.73
ZMAX	493520	11.76	15.46	15.48
ZMAX	493525	11.00	15.41	15.43
ZMAX	493530	14.50	17.42	13.33
ZMAX	493535	15.00	17.42	13.35
ZMAX	493540	13.50	15.99	0.00
ZMAX	493545	9.65	15.35	15.40
ZMAX	493550	14.50	15.28	12.65
ZMAX	493555	13.50	15.04	13.55
ZMAX	494010	24.80	26.26	12.77
ZMAX	494020	22.90	25.62	12.60
ZMAX	494025	20.00	21.47	12.73
ZMAX	494030	22.00	22.79	12.85
ZMAX	494040	19.00	20.66	13.03
ZMAX	494045	18.70	20.65	13.03

EXISTING CONDITIONS 100-YEAR 24-HOUR

ZMAX	494050	20.00	25.25	12.73
ZMAX	494060	25.00	26.28	13.18
ZMAX	494070	18.00	20.26	13.60
ZMAX	494072	19.00	22.15	13.08
ZMAX	494074	20.00	21.10	12.70
ZMAX	494076	19.00	21.10	12.68
ZMAX	494078	21.00	22.23	12.72
ZMAX	494080	18.00	20.33	13.02
ZMAX	494100	17.00	19.10	15.08
ZMAX	494110	15.29	18.57	14.48
ZMAX	494120	18.00	19.59	13.20
ZMAX	494130	17.00	18.77	14.10
ZMAX	494140	14.50	18.76	14.23
ZMAX	494150	15.00	18.59	14.45
ZMAX	494170	18.00	20.28	13.58
ZMAX	494180	17.00	19.66	14.15
ZMAX	494185	17.00	20.15	13.62
ZMAX	494190	17.00	19.34	13.78
ZMAX	494200	15.00	16.97	0.03
ZMAX	494205	17.00	19.09	12.53
ZMAX	494210	14.87	18.80	0.00
ZMAX	494220	15.75	18.22	0.02
ZMAX	494230	16.00	18.17	13.70
ZMAX	494240	15.71	18.53	13.37
ZMAX	494250	16.70	17.98	0.00
ZMAX	495010	20.00	23.26	12.52
ZMAX	495020	15.50	19.52	18.42
ZMAX	495030	15.50	19.52	18.43
ZMAX	495035	19.00	21.77	24.98
ZMAX	495038	17.00	18.22	12.77
ZMAX	495040	16.00	18.76	12.87
ZMAX	495045	15.00	15.98	12.67
ZMAX	495050	15.50	19.03	16.05
ZMAX	495055	15.50	16.85	12.53
ZMAX	495060	14.80	15.96	12.65
ZMAX	495065	14.50	16.32	12.52
ZMAX	495070	11.50	14.49	17.20
ZMAX	495075	11.50	14.14	20.27
ZMAX	495080	13.18	14.49	17.20
ZMAX	495085	13.00	15.05	16.02
ZMAX	495090	11.42	14.21	20.22
ZMAX	495100	15.00	18.78	14.18
ZMAX	495110	14.50	17.11	12.50
ZMAX	495120	13.00	14.32	12.75
ZMAX	495125	14.42	16.58	14.43
ZMAX	495140	14.50	16.90	16.17
ZMAX	495145	14.50	16.90	16.18
ZMAX	495150	13.00	14.33	12.75
ZMAX	495152	12.50	16.64	25.45
ZMAX	495154	12.50	16.07	13.87
ZMAX	495155	12.50	16.07	13.87
ZMAX	495156	12.50	13.80	20.53
ZMAX	495160	12.50	16.10	15.55
ZMAX	495162	13.50	16.19	25.53
ZMAX	495165	13.50	16.06	13.48
ZMAX	495170	12.50	15.82	13.07
ZMAX	495180	10.45	13.34	20.58
ZMAX	495210	12.50	15.26	25.08
ZMAX	495215	12.50	14.31	12.77
ZMAX	495230	8.82	12.83	13.18
ZMAX	495235	10.50	14.37	24.82
ZMAX	495240	8.50	11.85	22.07
ZMAX	495260	13.00	16.56	24.80
ZMAX	495270	12.50	14.30	12.77
ZMAX	495275	11.50	13.31	12.73
ZMAX	495280	10.90	11.87	22.05
ZMAX	495300	13.94	15.91	13.40

EXISTING CONDITIONS 100-YEAR 24-HOUR

ZMAX	495302	13.90	15.88	13.35
ZMAX	495304	13.31	15.81	13.13
ZMAX	495306	12.73	14.64	13.58
ZMAX	495308	12.18	14.46	13.78
ZMAX	495310	11.49	14.17	20.25
ZMAX	495312	10.92	14.16	20.25
ZMAX	495314	10.43	14.15	20.25
ZMAX	495316	11.80	14.20	13.12
ZMAX	495320	9.75	14.15	20.22
ZMAX	495322	9.64	15.29	15.45
ZMAX	495324	9.44	15.00	15.77
ZMAX	495326	9.30	14.62	16.70
ZMAX	495328	9.43	14.49	17.20
ZMAX	495330	9.20	14.49	17.20
ZMAX	495332	9.02	14.49	17.18
ZMAX	495334	8.90	14.29	18.73
ZMAX	495336	8.72	14.15	20.18
ZMAX	495338	8.53	14.13	20.27
ZMAX	495340	8.40	14.12	20.30
ZMAX	495342	8.23	14.10	20.30
ZMAX	495344	8.04	13.92	20.48
ZMAX	495346	7.85	13.80	20.53
ZMAX	495348	7.66	13.34	20.58
ZMAX	495350	7.47	12.17	21.65
ZMAX	495352	7.34	11.87	22.03
ZMAX	495354	7.26	11.86	22.05
ZMAX	495356	7.19	11.79	22.07
ZMAX	496010	14.50	16.58	14.43
ZMAX	496020	14.50	18.79	0.00
ZMAX	496030	14.50	16.49	14.42
ZMAX	496060	16.60	16.79	12.68
ZMAX	496065	14.00	16.47	14.42
ZMAX	496070	14.00	16.48	14.43
ZMAX	496080	14.20	17.99	0.00
ZMAX	496090	14.00	17.99	0.00
ZMAX	496100	12.50	16.10	14.55
ZMAX	496110	11.00	15.96	14.60
ZMAX	496120	13.00	15.71	18.20
ZMAX	496125	12.00	15.70	18.17
ZMAX	496130	13.00	15.80	14.65
ZMAX	496150	14.00	15.90	14.63
ZMAX	496160	11.00	15.70	18.17
ZMAX	496170	12.00	15.94	14.62
ZMAX	496175	12.00	15.01	14.63
ZMAX	496180	11.00	13.37	12.90
ZMAX	496190	11.00	13.36	12.90
ZMAX	496200	10.50	12.52	14.78
ZMAX	496232	16.00	18.00	0.00
ZMAX	496234	14.00	16.36	0.15
ZMAX	496235	15.00	15.58	13.48
ZMAX	496240	14.28	15.85	0.03
ZMAX	496245	13.50	15.42	13.73
ZMAX	496260	13.50	15.38	13.73
ZMAX	496270	12.50	14.07	13.67
ZMAX	496280	9.50	12.64	14.80
ZMAX	496310	10.50	12.48	14.85
ZMAX	496320	10.50	12.45	14.85
ZMAX	496340	4.43	12.44	14.83
ZMAX	496350	8.50	11.02	22.97
ZMAX	496360	7.50	9.39	21.18
ZMAX	496370	6.50	9.39	21.15
ZMAX	496380	5.50	9.39	21.10
ZMAX	496390	4.41	9.44	20.92
ZMAX	496395	4.50	9.29	21.40
ZMAX	496400	6.50	9.38	21.08
ZMAX	496410	-0.65	9.29	21.40
ZMAX	496420	3.50	9.24	21.60

EXISTING CONDITIONS 100-YEAR 24-HOUR

ZMAX	496430	5.50	9.25	12.75
ZMAX	496440	5.50	9.22	22.13
ZMAX	496450	3.50	9.22	22.12
ZMAX	496460	5.50	10.23	13.72
ZMAX	496470	3.00	9.22	22.12
ZMAX	496480	6.50	10.20	13.72
ZMAX	496485	7.50	11.03	13.25
ZMAX	496490	3.50	9.22	22.13
ZMAX	496500	6.50	11.00	0.00
ZMAX	496510	4.50	9.22	22.13
ZMAX	496515	4.50	9.22	22.12
ZMAX	496520	5.50	9.22	22.08
ZMAX	496530	5.50	9.22	22.13
ZMAX	496540	6.50	9.22	22.10
ZMAX	496545	4.00	9.22	22.10
ZMAX	496550	4.00	9.22	22.08
ZMAX	496560	3.00	9.22	22.08
ZMAX	496570	5.50	9.21	22.05
ZMAX	496580	7.50	11.05	12.80
ZMAX	496590	4.50	9.29	21.40
ZMAX	496600	-1.88	9.22	22.00
ZMAX	496610	4.50	9.20	21.95
ZMAX	496620	4.50	9.19	21.87
ZMAX	497010	11.00	13.96	13.23
ZMAX	497020	3.50	11.47	22.25
ZMAX	497025	8.50	11.19	12.72
ZMAX	497035	6.50	10.81	22.62
ZMAX	497045	4.50	9.40	22.53
ZMAX	497050	3.50	9.39	22.52
ZMAX	497055	3.50	9.18	22.57
ZMAX	497065	1.88	9.17	22.57
ZMAX	497070	8.50	11.68	15.48
ZMAX	497080	2.06	9.06	22.27
ZMAX	497085	6.50	10.96	22.52
ZMAX	497086	6.32	11.77	22.07
ZMAX	497088	5.89	11.47	22.25
ZMAX	497090	4.32	11.18	22.38
ZMAX	497092	3.75	10.90	22.52
ZMAX	497094	2.75	10.60	22.50
ZMAX	497096	2.30	9.79	22.58
ZMAX	497098	1.85	9.54	22.50
ZMAX	497100	-0.16	9.37	22.48
ZMAX	497102	-1.57	9.32	22.45
ZMAX	497104	-2.19	9.27	22.38
ZMAX	497105	-1.00	9.22	22.35
ZMAX	497106	-1.37	9.03	22.20
ZMAX	497107	-2.07	9.02	22.17
ZMAX	497108	-0.37	8.99	22.15
ZMAX	497109	-4.75	8.96	22.17
ZMAX	497111	-3.66	8.95	22.13
ZMAX	497112	-3.66	8.89	22.13
ZMAX	497113	-5.33	8.78	22.13
ZMAX	497110	-0.19	11.85	15.47
ZMAX	497120	1.50	9.04	22.22
ZMAX	497122	4.50	9.04	22.22
ZMAX	497124	4.00	9.04	22.22
ZMAX	497130	-0.21	9.23	21.50
ZMAX	497140	4.00	9.05	22.25
ZMAX	497150	5.40	8.96	22.17
ZMAX	497160	-1.85	9.18	21.80
ZMAX	497161	-2.25	9.12	21.90
ZMAX	497162	-2.86	9.00	22.07
ZMAX	497170	-6.19	5.04	22.15
ZMAX	500010	6.94	11.62	12.82
ZMAX	500020	8.41	10.90	15.05
ZMAX	500025	6.13	11.47	12.87
ZMAX	500030	5.77	11.45	12.87

EXISTING CONDITIONS 100-YEAR 24-HOUR

ZMAX	500040	5.07	11.02	12.95
ZMAX	500050	4.00	9.80	22.62
ZMAX	500110	7.43	11.64	12.82
ZMAX	500120	6.16	11.18	22.52
ZMAX	500130	8.00	12.76	13.77
ZMAX	500140	6.39	11.19	23.47
ZMAX	500210	4.00	11.21	23.53
ZMAX	500220	6.91	11.65	12.82
ZMAX	500300	5.00	10.19	12.68
ZMAX	9498000	-6.69	2.96	0.00
ZMAX	9496630	12.00	12.00	0.00
ZMAX	9493020	20.00	20.00	0.00
ZMAX	9493060	22.50	22.50	0.00
ZMAX	9493190	19.00	19.00	0.00
ZMAX	9493140	19.98	19.98	0.00
ZMAX	9493150	19.70	19.70	0.00
ZMAX	9493240	19.00	19.00	0.00
ZMAX	9495030	17.48	17.48	0.00
ZMAX	9495010	23.20	23.20	0.00
ZMAX	9495085	15.10	15.10	0.00
ZMAX	9495140	16.00	16.00	0.00
ZMAX	9495145	16.00	16.00	0.00
ZMAX	9495160	15.50	15.50	0.00
ZMAX	9496320	11.00	11.00	0.00
ZMAX	9496260	14.00	14.00	0.00
ZMAX	9494250	18.00	18.00	0.00
ZMAX	9494190	18.50	18.50	0.00
ZMAX	100043	99.00	99.00	0.00
ZMAX	100044	99.00	99.00	0.00
ZMAX	100045	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100047	99.00	99.00	0.00
ZMAX	100048	99.00	99.00	0.00
ZMAX	100049	99.00	99.00	0.00
ZMAX	100050	99.00	99.00	0.00
ZMAX	100051	99.00	99.00	0.00
ZMAX	100052	99.00	99.00	0.00
ZMAX	100053	99.00	99.00	0.00
ZMAX	100054	99.00	99.00	0.00
ZMAX	100055	99.00	99.00	0.00
ZMAX	100056	99.00	99.00	0.00
ZMAX	100057	99.00	99.00	0.00
ZMAX	100058	99.00	99.00	0.00
ZMAX	100059	99.00	99.00	0.00
ZMAX	100060	99.00	99.00	0.00
ZMAX	100061	99.00	99.00	0.00
ZMAX	100062	99.00	99.00	0.00
ZMAX	100063	99.00	99.00	0.00
ZMAX	100064	99.00	99.00	0.00
ZMAX	100065	99.00	99.00	0.00
ZMAX	100066	99.00	99.00	0.00
ZMAX	100067	99.00	99.00	0.00
ZMAX	100068	99.00	99.00	0.00
ZMAX	100069	99.00	99.00	0.00
ZMAX	100070	99.00	99.00	0.00
ZMAX	100071	99.00	99.00	0.00
ZMAX	100072	99.00	99.00	0.00
ZMAX	100073	99.00	99.00	0.00
ZMAX	100074	99.00	99.00	0.00
ZMAX	100075	99.00	99.00	0.00
ZMAX	100076	99.00	99.00	0.00
ZMAX	100077	99.00	99.00	0.00
ZMAX	100078	99.00	99.00	0.00
ZMAX	100079	99.00	99.00	0.00
ZMAX	100080	99.00	99.00	0.00
ZMAX	100081	99.00	99.00	0.00

EXISTING CONDITIONS 100-YEAR 24-HOUR

ZMAX	100082	99.00	99.00	0.00
ZMAX	100083	99.00	99.00	0.00
ZMAX	100084	99.00	99.00	0.00
ZMAX	100085	99.00	99.00	0.00
ZMAX	100086	99.00	99.00	0.00
ZMAX	100087	99.00	99.00	0.00
ZMAX	100088	99.00	99.00	0.00
ZMAX	100089	99.00	99.00	0.00

APPENDIX B

Alternative 1 Weirs

ALTERNATIVE 1 5-YEAR 24-HOUR

	JUNC ID	INVT	Z_MAX	T_MAX
ZMAX	490000	24.23	26.46	0.00
ZMAX	490004	26.46	27.84	25.85
ZMAX	490002	20.93	26.14	29.05
ZMAX	490008	27.00	28.09	29.87
ZMAX	490010	26.16	28.19	39.67
ZMAX	490020	24.36	28.20	26.73
ZMAX	490030	26.46	28.14	25.25
ZMAX	490040	29.00	29.90	26.57
ZMAX	490050	25.16	28.39	15.43
ZMAX	490070	25.96	29.13	26.62
ZMAX	490071	29.00	29.91	14.60
ZMAX	490072	27.00	28.02	27.30
ZMAX	490073	30.00	32.31	14.45
ZMAX	490080	27.66	29.13	27.27
ZMAX	490090	28.00	30.71	27.40
ZMAX	490100	29.00	29.69	14.10
ZMAX	490110	26.16	29.70	25.18
ZMAX	490120	30.64	33.01	69.35
ZMAX	490130	28.96	33.02	69.30
ZMAX	490140	29.26	31.53	240.00
ZMAX	490141	31.00	32.13	26.37
ZMAX	490150	29.89	33.27	67.15
ZMAX	490160	29.77	34.52	59.60
ZMAX	490170	35.00	38.56	26.23
ZMAX	490180	32.66	37.49	26.72
ZMAX	490181	33.75	37.49	26.82
ZMAX	490200	36.66	38.56	26.23
ZMAX	490210	36.29	38.35	0.00
ZMAX	490211	39.00	40.60	17.20
ZMAX	490220	40.04	42.02	15.35
ZMAX	490221	42.00	44.50	30.53
ZMAX	490230	39.95	40.97	25.65
ZMAX	490240	26.36	30.28	24.42
ZMAX	490250	29.00	32.36	21.48
ZMAX	490251	33.00	34.78	29.83
ZMAX	490260	31.16	33.28	16.17
ZMAX	490261	34.00	36.08	13.83
ZMAX	490263	34.00	35.25	28.05
ZMAX	490264	33.00	34.83	24.37
ZMAX	490266	34.00	35.80	16.42
ZMAX	490270	35.00	37.74	14.40
ZMAX	490280	32.70	34.78	29.83
ZMAX	490281	32.70	34.78	29.75
ZMAX	490290	31.00	34.39	16.30
ZMAX	490300	31.86	33.17	13.50
ZMAX	490310	33.00	36.26	18.32
ZMAX	490320	34.00	37.76	20.60
ZMAX	490321	36.00	38.24	37.90
ZMAX	490330	37.00	38.66	27.77
ZMAX	490340	35.00	37.83	14.20
ZMAX	490350	36.00	38.67	25.85
ZMAX	490370	33.96	35.92	25.73
ZMAX	490375	35.00	38.08	57.13
ZMAX	490390	34.56	37.97	24.93
ZMAX	490391	36.80	37.26	26.05
ZMAX	490392	36.40	36.82	15.00
ZMAX	490400	37.00	38.89	25.85
ZMAX	490401	37.00	39.37	25.98
ZMAX	490410	35.46	38.08	57.08
ZMAX	490411	36.00	38.08	57.10
ZMAX	490420	35.00	40.20	50.95
ZMAX	490421	39.00	39.74	28.53
ZMAX	490422	39.00	41.05	25.17
ZMAX	490425	38.00	40.20	51.63
ZMAX	490430	35.47	40.69	26.00
ZMAX	490440	40.00	42.84	26.75

ALTERNATIVE 1 5-YEAR 24-HOUR

ZMAX	490450	39.00	40.58	57.92
ZMAX	490451	39.00	40.14	29.65
ZMAX	490453	39.00	40.14	31.75
ZMAX	490455	39.00	40.60	21.83
ZMAX	490460	43.00	45.73	27.53
ZMAX	490470	40.00	41.74	25.50
ZMAX	490480	39.67	42.00	0.00
ZMAX	490490	40.38	42.30	19.83
ZMAX	490500	41.00	44.61	59.72
ZMAX	490510	49.00	50.73	17.83
ZMAX	490520	43.47	48.11	27.60
ZMAX	490530	51.00	54.16	83.12
ZMAX	490535	56.47	57.94	16.12
ZMAX	490540	56.00	58.17	16.05
ZMAX	490550	48.00	49.28	17.52
ZMAX	490555	48.07	51.02	13.92
ZMAX	490560	49.00	49.74	16.27
ZMAX	490580	35.47	40.81	25.98
ZMAX	490590	48.37	49.31	26.27
ZMAX	490600	42.54	44.45	25.78
ZMAX	490610	39.77	41.38	27.08
ZMAX	490612	42.00	44.20	27.75
ZMAX	490620	41.70	42.88	16.80
ZMAX	490621	44.00	45.18	27.30
ZMAX	490630	42.17	44.53	20.53
ZMAX	490637	41.53	42.43	14.78
ZMAX	490638	44.12	44.50	24.82
ZMAX	490639	48.72	49.21	14.53
ZMAX	490640	37.57	40.86	25.37
ZMAX	490641	44.00	46.73	24.48
ZMAX	490642	45.16	47.24	16.32
ZMAX	490643	39.87	44.93	16.70
ZMAX	490644	47.67	49.21	14.60
ZMAX	490645	48.67	51.27	24.60
ZMAX	490646	41.53	47.31	14.48
ZMAX	490650	43.27	45.09	19.27
ZMAX	490651	48.16	50.18	16.65
ZMAX	490652	43.47	46.22	13.98
ZMAX	490654	46.00	48.13	26.82
ZMAX	490655	46.55	48.83	14.98
ZMAX	490659	45.57	48.11	14.32
ZMAX	490660	39.87	46.11	14.37
ZMAX	490661	45.57	49.72	16.63
ZMAX	490670	45.37	48.30	14.27
ZMAX	490675	41.87	48.11	14.30
ZMAX	490680	47.11	49.55	16.67
ZMAX	490690	45.49	48.39	14.18
ZMAX	490700	53.74	58.68	29.58
ZMAX	490710	47.96	52.09	27.78
ZMAX	490711	52.00	54.43	21.28
ZMAX	490720	50.00	52.14	27.97
ZMAX	490730	50.23	52.56	25.45
ZMAX	490740	49.64	53.25	17.57
ZMAX	490742	58.00	59.32	14.05
ZMAX	490743	48.76	53.27	18.00
ZMAX	490744	49.87	53.27	18.00
ZMAX	490745	57.00	59.15	29.72
ZMAX	490746	57.00	59.23	26.50
ZMAX	490750	51.30	53.51	16.03
ZMAX	490751	55.00	56.23	25.60
ZMAX	490760	50.95	53.93	20.07
ZMAX	490770	51.91	55.20	27.10
ZMAX	490771	55.00	56.06	25.68
ZMAX	490772	56.00	57.26	26.22
ZMAX	490773	56.00	58.54	25.82
ZMAX	490776	56.00	57.12	27.18
ZMAX	490779	55.00	57.10	24.95

ALTERNATIVE 1 5-YEAR 24-HOUR

ZMAX	490780	54.21	57.06	20.42
ZMAX	490790	53.17	55.16	41.82
ZMAX	490791	56.00	57.79	27.22
ZMAX	490792	56.00	57.63	26.03
ZMAX	490794	56.00	57.24	29.38
ZMAX	490795	56.00	56.98	27.40
ZMAX	490800	53.17	55.62	14.60
ZMAX	490801	55.00	57.11	25.08
ZMAX	490802	56.00	57.35	25.72
ZMAX	490803	57.00	57.89	28.22
ZMAX	490804	56.00	57.89	27.72
ZMAX	490900	53.67	55.16	41.88
ZMAX	491010	22.06	24.94	14.25
ZMAX	491019	26.44	27.43	17.70
ZMAX	491020	26.14	28.53	16.78
ZMAX	491021	26.00	28.54	17.08
ZMAX	491022	27.07	28.53	16.93
ZMAX	491040	23.16	25.04	14.20
ZMAX	491041	26.86	29.01	13.92
ZMAX	491042	27.66	28.61	16.12
ZMAX	491043	27.17	28.39	16.33
ZMAX	491044	27.66	28.94	13.97
ZMAX	491060	25.96	28.98	116.38
ZMAX	491080	25.66	29.01	116.38
ZMAX	491100	28.96	30.31	96.63
ZMAX	491102	29.00	31.08	13.28
ZMAX	491120	27.86	30.30	78.73
ZMAX	491121	29.25	32.22	42.45
ZMAX	491122	32.00	33.30	13.50
ZMAX	491123	32.00	33.51	17.65
ZMAX	491140	29.62	32.27	42.22
ZMAX	491160	30.66	32.57	17.13
ZMAX	491180	32.00	34.31	25.73
ZMAX	491200	34.46	36.56	14.65
ZMAX	491220	36.97	38.07	19.53
ZMAX	491221	33.05	36.27	14.00
ZMAX	491222	36.80	38.34	13.12
ZMAX	491223	34.39	36.28	13.98
ZMAX	491240	31.00	32.45	27.82
ZMAX	491260	29.00	31.14	86.48
ZMAX	491280	29.00	31.31	84.15
ZMAX	491285	30.77	38.29	14.47
ZMAX	491300	29.00	31.31	84.15
ZMAX	491302	33.00	36.22	18.52
ZMAX	491320	32.90	36.23	14.03
ZMAX	491340	29.17	31.70	35.60
ZMAX	491344	36.00	37.90	27.73
ZMAX	491342	31.36	34.00	14.92
ZMAX	491360	33.97	36.54	16.25
ZMAX	491380	31.36	35.21	17.23
ZMAX	491382	33.00	33.42	14.47
ZMAX	491384	30.00	32.09	26.75
ZMAX	491387	34.17	38.94	50.15
ZMAX	491388	34.17	40.79	26.65
ZMAX	491390	36.63	38.94	49.27
ZMAX	491391	35.17	38.97	49.25
ZMAX	491393	42.00	44.71	19.67
ZMAX	491394	36.67	40.02	17.42
ZMAX	491395	35.27	38.97	49.25
ZMAX	491396	38.00	40.30	27.32
ZMAX	491397	32.07	38.93	50.07
ZMAX	491398	42.00	44.02	41.60
ZMAX	491399	38.00	40.79	26.65
ZMAX	491400	33.27	35.12	13.50
ZMAX	491401	36.77	42.20	14.83
ZMAX	491402	32.17	38.94	49.28
ZMAX	491404	38.96	40.79	27.17

ALTERNATIVE 1 5-YEAR 24-HOUR

ZMAX	491406	36.77	40.02	17.37
ZMAX	491407	32.17	38.93	50.35
ZMAX	491392	43.00	47.25	27.48
ZMAX	491403	45.00	48.01	29.82
ZMAX	491440	38.17	39.66	27.67
ZMAX	491441	38.54	39.66	27.65
ZMAX	491460	30.71	35.80	24.70
ZMAX	491465	31.27	35.83	25.22
ZMAX	491480	33.87	36.50	13.55
ZMAX	491500	30.00	35.85	26.38
ZMAX	491501	31.17	35.84	26.03
ZMAX	491502	36.00	37.76	27.88
ZMAX	491520	38.15	40.01	13.38
ZMAX	491540	41.00	43.84	27.87
ZMAX	491541	42.00	45.46	27.55
ZMAX	491452	42.00	43.55	26.18
ZMAX	491453	37.18	39.41	13.48
ZMAX	491560	41.00	41.59	28.95
ZMAX	491561	38.00	41.35	29.92
ZMAX	491562	44.00	44.85	31.13
ZMAX	491563	39.00	41.35	29.92
ZMAX	491580	36.55	37.57	28.97
ZMAX	491600	39.73	41.37	240.00
ZMAX	491620	45.57	46.63	28.27
ZMAX	491621	48.00	50.20	27.60
ZMAX	490232	44.00	46.41	16.42
ZMAX	490431	41.00	44.07	26.53
ZMAX	490449	41.00	43.29	17.73
ZMAX	490457	39.00	40.61	22.20
ZMAX	490491	47.00	48.42	29.25
ZMAX	490492	47.00	50.25	29.27
ZMAX	490501	46.00	48.82	14.10
ZMAX	490511	48.00	49.65	28.08
ZMAX	490561	57.00	58.11	27.78
ZMAX	490581	44.00	45.94	15.03
ZMAX	490582	50.00	51.82	18.60
ZMAX	490584	50.00	51.51	26.03
ZMAX	490587	53.00	56.61	16.95
ZMAX	490701	54.00	58.55	20.10
ZMAX	490702	57.00	60.42	25.63
ZMAX	490703	53.74	55.00	14.12
ZMAX	490704	56.00	60.39	14.15
ZMAX	490713	52.00	53.82	29.12
ZMAX	490741	58.00	58.74	28.33
ZMAX	490762	56.00	58.18	27.28
ZMAX	490781	58.00	61.75	17.97
ZMAX	491274	31.22	38.40	14.72
ZMAX	491284	33.92	36.06	14.38
ZMAX	491389	39.00	40.35	27.20
ZMAX	491700	23.00	26.12	24.52
ZMAX	491701	9.70	24.05	37.10
ZMAX	491702	55.00	56.74	35.83
ZMAX	491703	25.00	27.31	18.43
ZMAX	491704	56.00	58.66	16.53
ZMAX	491705	55.80	56.74	35.83
ZMAX	491706	48.90	51.25	27.72
ZMAX	491707	45.00	46.40	30.12
ZMAX	491708	36.00	38.27	28.08
ZMAX	491709	37.00	39.09	16.23
ZMAX	491710	27.00	28.65	16.65
ZMAX	491711	24.00	25.42	40.30
ZMAX	491712	30.33	33.33	29.95
ZMAX	491713	30.00	33.34	30.13
ZMAX	491714	31.00	32.02	21.07
ZMAX	491715	40.17	41.74	25.38
ZMAX	491716	30.00	34.36	28.57
ZMAX	491717	52.00	55.10	26.70

ALTERNATIVE 1 5-YEAR 24-HOUR

ZMAX	491718	34.00	36.29	15.75
ZMAX	491719	42.00	45.70	28.52
ZMAX	491720	38.00	40.31	16.47
ZMAX	491721	38.00	39.98	25.93
ZMAX	491722	39.00	39.57	16.95
ZMAX	491723	29.00	37.08	39.95
ZMAX	491724	29.00	34.36	28.88
ZMAX	491725	33.00	33.95	16.62
ZMAX	491728	30.00	34.61	27.77
ZMAX	491729	27.00	30.19	27.33
ZMAX	491730	26.00	29.17	22.00
ZMAX	491737	38.00	38.53	16.62
ZMAX	491740	37.00	38.49	16.32
ZMAX	491745	37.00	38.92	21.35
ZMAX	491746	37.00	38.72	28.12
ZMAX	491750	44.00	45.43	27.72
ZMAX	491753	49.00	50.77	29.85
ZMAX	490574	41.77	45.22	15.65
ZMAX	491405	42.00	44.34	28.37
ZMAX	490714	52.00	54.09	17.12
ZMAX	490753	51.00	53.78	28.50
ZMAX	491224	39.00	41.41	28.83
ZMAX	491225	41.50	43.41	14.97
ZMAX	491759	39.00	40.31	21.92
ZMAX	491760	39.00	40.27	22.13
ZMAX	491764	38.00	40.00	20.45
ZMAX	491768	38.00	39.63	22.73
ZMAX	499999	35.85	39.59	22.75
ZMAX	499998	35.80	39.58	22.73
ZMAX	499997	35.00	35.80	22.73
ZMAX	491002	30.84	33.34	30.15
ZMAX	491001	28.00	33.34	30.10
ZMAX	100000	99.00	99.00	0.00
ZMAX	100001	99.00	99.00	0.00
ZMAX	100002	99.00	99.00	0.00
ZMAX	100003	99.00	99.00	0.00
ZMAX	100004	99.00	99.00	0.00
ZMAX	100005	99.00	99.00	0.00
ZMAX	100006	99.00	99.00	0.00
ZMAX	100007	99.00	99.00	0.00
ZMAX	100008	99.00	99.00	0.00
ZMAX	100009	99.00	99.00	0.00
ZMAX	100010	99.00	99.00	0.00
ZMAX	100011	99.00	99.00	0.00
ZMAX	100012	99.00	99.00	0.00
ZMAX	100013	99.00	99.00	0.00
ZMAX	100014	99.00	99.00	0.00
ZMAX	100015	99.00	99.00	0.00
ZMAX	100016	99.00	99.00	0.00
ZMAX	100017	99.00	99.00	0.00
ZMAX	100018	99.00	99.00	0.00
ZMAX	100019	99.00	99.00	0.00
ZMAX	100020	99.00	99.00	0.00
ZMAX	100021	99.00	99.00	0.00
ZMAX	100022	99.00	99.00	0.00
ZMAX	100023	99.00	99.00	0.00
ZMAX	100024	99.00	99.00	0.00
ZMAX	100025	99.00	99.00	0.00
ZMAX	100026	99.00	99.00	0.00
ZMAX	100027	99.00	99.00	0.00
ZMAX	100028	99.00	99.00	0.00
ZMAX	100029	99.00	99.00	0.00
ZMAX	100030	99.00	99.00	0.00
ZMAX	100031	99.00	99.00	0.00
ZMAX	100032	99.00	99.00	0.00
ZMAX	100033	99.00	99.00	0.00
ZMAX	100034	99.00	99.00	0.00

ALTERNATIVE 1 5-YEAR 24-HOUR

ZMAX	100035	99.00	99.00	0.00
ZMAX	100036	99.00	99.00	0.00
ZMAX	100037	99.00	99.00	0.00
ZMAX	100038	99.00	99.00	0.00
ZMAX	100039	99.00	99.00	0.00
ZMAX	100040	99.00	99.00	0.00
ZMAX	493010	17.00	22.66	25.45
ZMAX	493020	20.00	22.62	27.23
ZMAX	493030	18.00	24.41	13.30
ZMAX	493040	17.00	22.11	21.47
ZMAX	493060	21.00	21.45	13.35
ZMAX	493070	19.00	25.64	13.65
ZMAX	493090	18.00	22.29	25.08
ZMAX	493100	20.00	21.11	12.67
ZMAX	493110	18.00	19.93	12.95
ZMAX	493120	18.00	19.99	0.00
ZMAX	493130	17.00	20.08	13.00
ZMAX	493140	16.00	18.43	13.70
ZMAX	493150	16.00	19.33	13.83
ZMAX	493180	18.00	24.08	14.90
ZMAX	493185	19.00	23.23	18.43
ZMAX	493190	17.00	19.21	13.03
ZMAX	493195	17.00	20.06	13.65
ZMAX	493200	18.00	19.75	13.65
ZMAX	493210	18.00	19.18	13.03
ZMAX	493215	19.00	20.75	25.27
ZMAX	493220	16.00	18.96	13.32
ZMAX	493230	15.50	18.43	13.70
ZMAX	493240	16.00	19.06	14.82
ZMAX	493250	17.00	24.08	14.90
ZMAX	493260	21.00	24.08	14.97
ZMAX	493270	19.00	24.07	14.97
ZMAX	493280	19.00	23.06	13.03
ZMAX	493290	19.00	22.23	15.38
ZMAX	493310	17.00	21.71	29.07
ZMAX	493320	17.00	19.80	0.00
ZMAX	493330	17.00	19.80	13.28
ZMAX	493340	16.33	19.74	13.65
ZMAX	493350	15.50	17.69	13.17
ZMAX	493360	13.00	18.00	0.00
ZMAX	493370	14.61	17.75	13.97
ZMAX	493380	14.50	17.11	16.92
ZMAX	493390	14.50	17.86	13.77
ZMAX	493400	13.50	17.11	16.90
ZMAX	493410	12.50	17.11	16.90
ZMAX	493420	13.50	16.28	0.03
ZMAX	493430	12.44	15.94	0.07
ZMAX	493440	15.50	18.71	28.10
ZMAX	493450	18.00	18.98	14.05
ZMAX	493470	16.00	18.98	14.07
ZMAX	493480	15.50	19.00	14.03
ZMAX	493500	12.27	16.34	14.28
ZMAX	493505	12.27	14.79	16.17
ZMAX	493520	11.76	14.27	17.05
ZMAX	493525	11.00	14.23	17.15
ZMAX	493530	14.50	17.13	16.60
ZMAX	493535	15.00	17.13	16.60
ZMAX	493540	13.50	15.99	0.00
ZMAX	493545	9.65	14.22	17.17
ZMAX	493550	14.50	15.20	12.70
ZMAX	493555	13.50	14.81	12.50
ZMAX	494010	24.80	26.00	0.00
ZMAX	494020	22.90	25.55	12.93
ZMAX	494025	20.00	21.16	12.95
ZMAX	494030	22.00	22.69	13.00
ZMAX	494040	19.00	20.45	13.07
ZMAX	494045	18.70	20.44	13.07

ALTERNATIVE 1 5-YEAR 24-HOUR

ZMAX	494050	20.00	25.00	0.00
ZMAX	494060	25.00	26.00	0.00
ZMAX	494070	18.00	19.71	13.70
ZMAX	494072	19.00	22.01	24.17
ZMAX	494074	20.00	21.05	13.12
ZMAX	494076	19.00	21.05	12.68
ZMAX	494078	21.00	22.12	12.85
ZMAX	494080	18.00	20.11	13.10
ZMAX	494100	17.00	19.06	15.18
ZMAX	494110	15.29	17.07	14.30
ZMAX	494120	18.00	19.22	13.35
ZMAX	494130	17.00	18.36	14.02
ZMAX	494140	14.50	18.34	14.03
ZMAX	494150	15.00	17.07	14.28
ZMAX	494170	18.00	19.72	13.67
ZMAX	494180	17.00	19.60	15.65
ZMAX	494185	17.00	19.56	13.80
ZMAX	494190	17.00	18.34	13.85
ZMAX	494200	15.00	16.97	0.03
ZMAX	494205	17.00	18.99	15.12
ZMAX	494210	14.87	18.80	0.00
ZMAX	494220	15.75	18.22	0.02
ZMAX	494230	16.00	18.09	0.03
ZMAX	494240	15.71	18.22	13.45
ZMAX	494250	16.70	17.98	0.00
ZMAX	495010	20.00	23.20	0.00
ZMAX	495020	15.50	18.71	28.10
ZMAX	495030	15.50	18.71	28.10
ZMAX	495035	19.00	20.34	24.98
ZMAX	495038	17.00	18.10	12.90
ZMAX	495040	16.00	18.63	12.92
ZMAX	495045	15.00	15.77	12.73
ZMAX	495050	15.50	18.34	24.92
ZMAX	495055	15.50	16.79	12.95
ZMAX	495060	14.80	15.76	12.73
ZMAX	495065	14.50	16.15	13.05
ZMAX	495070	11.50	12.84	13.27
ZMAX	495075	11.50	12.50	0.00
ZMAX	495080	13.18	13.99	0.00
ZMAX	495085	13.00	15.02	20.35
ZMAX	495090	11.42	12.99	14.20
ZMAX	495100	15.00	18.30	15.53
ZMAX	495110	14.50	17.04	12.75
ZMAX	495120	13.00	14.12	13.35
ZMAX	495125	14.42	16.05	14.82
ZMAX	495140	14.50	16.55	17.73
ZMAX	495145	14.50	16.39	240.00
ZMAX	495150	13.00	14.12	13.35
ZMAX	495152	12.50	15.08	25.55
ZMAX	495154	12.50	15.43	25.97
ZMAX	495155	12.50	15.43	25.97
ZMAX	495156	12.50	13.49	0.00
ZMAX	495160	12.50	15.34	25.58
ZMAX	495162	13.50	14.84	25.57
ZMAX	495165	13.50	15.49	25.70
ZMAX	495170	12.50	15.70	24.82
ZMAX	495180	10.45	12.41	0.00
ZMAX	495210	12.50	13.90	25.12
ZMAX	495215	12.50	14.12	13.35
ZMAX	495230	8.82	11.69	13.03
ZMAX	495235	10.50	13.33	24.80
ZMAX	495240	8.50	10.28	25.15
ZMAX	495260	13.00	15.50	23.82
ZMAX	495270	12.50	14.11	13.35
ZMAX	495275	11.50	13.10	13.50
ZMAX	495280	10.90	11.14	13.52
ZMAX	495300	13.94	15.51	15.20

ALTERNATIVE 1 5-YEAR 24-HOUR

ZMAX	495302	13.90	15.45	15.28
ZMAX	495304	13.31	15.27	13.30
ZMAX	495306	12.73	14.11	15.28
ZMAX	495308	12.18	14.03	15.70
ZMAX	495310	11.49	12.96	13.53
ZMAX	495312	10.92	12.94	13.42
ZMAX	495314	10.43	12.50	24.10
ZMAX	495316	11.80	14.11	12.53
ZMAX	495320	9.75	12.50	24.17
ZMAX	495322	9.64	13.45	17.53
ZMAX	495324	9.44	13.28	17.67
ZMAX	495326	9.30	12.87	18.62
ZMAX	495328	9.43	12.83	13.47
ZMAX	495330	9.20	12.84	13.27
ZMAX	495332	9.02	12.78	19.52
ZMAX	495334	8.90	12.63	22.15
ZMAX	495336	8.72	12.49	24.18
ZMAX	495338	8.53	12.49	24.22
ZMAX	495340	8.40	12.49	24.20
ZMAX	495342	8.23	12.48	24.30
ZMAX	495344	8.04	12.36	24.67
ZMAX	495346	7.85	12.08	24.65
ZMAX	495348	7.66	11.87	24.78
ZMAX	495350	7.47	10.63	24.98
ZMAX	495352	7.34	10.29	25.13
ZMAX	495354	7.26	10.28	25.07
ZMAX	495356	7.19	10.25	25.17
ZMAX	496010	14.50	16.24	0.12
ZMAX	496020	14.50	18.79	0.00
ZMAX	496030	14.50	16.32	0.02
ZMAX	496060	16.60	16.75	12.83
ZMAX	496065	14.00	16.28	0.10
ZMAX	496070	14.00	16.25	0.10
ZMAX	496080	14.20	17.99	0.00
ZMAX	496090	14.00	17.99	0.00
ZMAX	496100	12.50	15.91	0.07
ZMAX	496110	11.00	15.54	15.03
ZMAX	496120	13.00	15.09	14.60
ZMAX	496125	12.00	14.40	21.53
ZMAX	496130	13.00	15.45	15.10
ZMAX	496150	14.00	15.51	15.07
ZMAX	496160	11.00	14.39	21.53
ZMAX	496170	12.00	15.54	15.05
ZMAX	496175	12.00	14.88	15.08
ZMAX	496180	11.00	13.19	15.32
ZMAX	496190	11.00	13.19	15.32
ZMAX	496200	10.50	11.37	15.00
ZMAX	496232	16.00	18.00	0.00
ZMAX	496234	14.00	16.36	0.15
ZMAX	496235	15.00	15.41	0.12
ZMAX	496240	14.28	15.85	0.03
ZMAX	496245	13.50	15.18	0.12
ZMAX	496260	13.50	15.05	0.28
ZMAX	496270	12.50	13.68	0.27
ZMAX	496280	9.50	12.15	14.28
ZMAX	496310	10.50	11.37	14.30
ZMAX	496320	10.50	11.22	14.27
ZMAX	496340	4.43	10.42	15.13
ZMAX	496350	8.50	9.88	25.07
ZMAX	496360	7.50	8.97	25.27
ZMAX	496370	6.50	8.23	16.38
ZMAX	496380	5.50	8.23	16.30
ZMAX	496390	4.41	8.29	16.23
ZMAX	496395	4.50	8.08	16.45
ZMAX	496400	6.50	8.22	16.28
ZMAX	496410	-0.65	8.08	16.43
ZMAX	496420	3.50	7.11	17.80

ALTERNATIVE 1 5-YEAR 24-HOUR

ZMAX	496430	5.50	9.04	14.10
ZMAX	496440	5.50	7.82	27.10
ZMAX	496450	3.50	7.82	27.10
ZMAX	496460	5.50	9.98	26.00
ZMAX	496470	3.00	7.50	18.58
ZMAX	496480	6.50	8.35	25.10
ZMAX	496485	7.50	10.67	25.40
ZMAX	496490	3.50	8.27	24.98
ZMAX	496500	6.50	11.00	0.00
ZMAX	496510	4.50	7.41	25.10
ZMAX	496515	4.50	7.97	16.62
ZMAX	496520	5.50	7.50	18.58
ZMAX	496530	5.50	7.50	18.60
ZMAX	496540	6.50	7.50	18.60
ZMAX	496545	4.00	7.50	18.58
ZMAX	496550	4.00	7.50	18.58
ZMAX	496560	3.00	7.50	18.57
ZMAX	496570	5.50	7.50	18.58
ZMAX	496580	7.50	10.88	24.98
ZMAX	496590	4.50	8.08	16.45
ZMAX	496600	-1.88	7.50	18.50
ZMAX	496610	4.50	7.18	13.22
ZMAX	496620	4.50	7.17	13.23
ZMAX	497010	11.00	13.88	13.82
ZMAX	497020	3.50	10.06	25.48
ZMAX	497025	8.50	11.09	12.88
ZMAX	497035	6.50	10.20	13.87
ZMAX	497045	4.50	7.67	14.68
ZMAX	497050	3.50	7.66	14.70
ZMAX	497055	3.50	6.68	13.62
ZMAX	497065	1.88	5.10	14.30
ZMAX	497070	8.50	9.97	12.95
ZMAX	497080	2.06	6.03	0.00
ZMAX	497085	6.50	9.96	25.63
ZMAX	497086	6.32	10.25	25.17
ZMAX	497088	5.89	10.06	25.48
ZMAX	497090	4.32	9.97	25.63
ZMAX	497092	3.75	9.18	25.83
ZMAX	497094	2.75	8.73	25.93
ZMAX	497096	2.30	8.22	26.07
ZMAX	497098	1.85	8.08	26.07
ZMAX	497100	-0.16	6.40	25.28
ZMAX	497102	-1.57	5.65	24.85
ZMAX	497104	-2.19	5.47	15.08
ZMAX	497105	-1.00	5.47	15.08
ZMAX	497106	-1.37	4.91	18.62
ZMAX	497107	-2.07	4.88	18.60
ZMAX	497108	-0.37	4.88	18.58
ZMAX	497109	-4.75	4.96	18.62
ZMAX	497111	-3.66	4.90	18.65
ZMAX	497112	-3.66	5.08	18.55
ZMAX	497113	-5.33	5.50	18.58
ZMAX	497110	-0.19	7.07	23.77
ZMAX	497120	1.50	4.89	18.70
ZMAX	497122	4.50	5.42	13.18
ZMAX	497124	4.00	4.89	18.70
ZMAX	497130	-0.21	7.04	23.35
ZMAX	497140	4.00	6.50	0.00
ZMAX	497150	5.40	6.88	12.50
ZMAX	497160	-1.85	7.09	17.92
ZMAX	497161	-2.25	6.63	18.02
ZMAX	497162	-2.86	5.82	18.10
ZMAX	497170	-6.19	3.48	18.60
ZMAX	500010	6.94	10.77	12.72
ZMAX	500020	8.41	9.59	13.77
ZMAX	500025	6.13	9.70	12.83
ZMAX	500030	5.77	9.61	12.88

ALTERNATIVE 1 5-YEAR 24-HOUR

ZMAX	500040	5.07	9.44	12.97
ZMAX	500050	4.00	8.55	12.85
ZMAX	500110	7.43	10.42	12.73
ZMAX	500120	6.16	9.96	26.45
ZMAX	500130	8.00	10.81	13.42
ZMAX	500140	6.39	9.96	26.42
ZMAX	500210	4.00	9.96	26.30
ZMAX	500220	6.91	10.84	12.57
ZMAX	500300	5.00	9.92	12.78
ZMAX	9498000	-6.69	2.96	0.00
ZMAX	9496630	12.00	12.00	0.00
ZMAX	9493020	20.00	20.00	0.00
ZMAX	9493060	22.50	22.50	0.00
ZMAX	9493190	19.00	19.00	0.00
ZMAX	9493140	19.98	19.98	0.00
ZMAX	9493150	19.70	19.70	0.00
ZMAX	9493240	19.00	19.00	0.00
ZMAX	9495030	17.48	17.48	0.00
ZMAX	9495010	23.20	23.20	0.00
ZMAX	9495085	15.10	15.10	0.00
ZMAX	9495140	16.00	16.00	0.00
ZMAX	9495145	16.00	16.00	0.00
ZMAX	9495160	15.50	15.50	0.00
ZMAX	9496320	11.00	11.00	0.00
ZMAX	9496260	14.00	14.00	0.00
ZMAX	9494250	18.00	18.00	0.00
ZMAX	9494190	18.50	18.50	0.00
ZMAX	100043	99.00	99.00	0.00
ZMAX	100044	99.00	99.00	0.00
ZMAX	100045	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100047	99.00	99.00	0.00
ZMAX	100048	99.00	99.00	0.00
ZMAX	100049	99.00	99.00	0.00
ZMAX	100050	99.00	99.00	0.00
ZMAX	100051	99.00	99.00	0.00
ZMAX	100052	99.00	99.00	0.00
ZMAX	100053	99.00	99.00	0.00
ZMAX	100054	99.00	99.00	0.00
ZMAX	100055	99.00	99.00	0.00
ZMAX	100056	99.00	99.00	0.00
ZMAX	100057	99.00	99.00	0.00
ZMAX	100058	99.00	99.00	0.00
ZMAX	100059	99.00	99.00	0.00
ZMAX	100060	99.00	99.00	0.00
ZMAX	100061	99.00	99.00	0.00
ZMAX	100062	99.00	99.00	0.00
ZMAX	100063	99.00	99.00	0.00
ZMAX	100064	99.00	99.00	0.00
ZMAX	100065	99.00	99.00	0.00
ZMAX	100066	99.00	99.00	0.00
ZMAX	100067	99.00	99.00	0.00
ZMAX	100068	99.00	99.00	0.00
ZMAX	100069	99.00	99.00	0.00
ZMAX	100070	99.00	99.00	0.00
ZMAX	100071	99.00	99.00	0.00
ZMAX	100072	99.00	99.00	0.00
ZMAX	100073	99.00	99.00	0.00
ZMAX	100074	99.00	99.00	0.00
ZMAX	100075	99.00	99.00	0.00
ZMAX	100076	99.00	99.00	0.00
ZMAX	100077	99.00	99.00	0.00
ZMAX	100078	99.00	99.00	0.00
ZMAX	100079	99.00	99.00	0.00
ZMAX	100080	99.00	99.00	0.00
ZMAX	100081	99.00	99.00	0.00

ALTERNATIVE 1 5-YEAR 24-HOUR

ZMAX	100082	99.00	99.00	0.00
ZMAX	100083	99.00	99.00	0.00
ZMAX	100084	99.00	99.00	0.00
ZMAX	100085	99.00	99.00	0.00
ZMAX	100086	99.00	99.00	0.00
ZMAX	100087	99.00	99.00	0.00
ZMAX	100088	99.00	99.00	0.00
ZMAX	100089	99.00	99.00	0.00
ZMAX	493341	16.33	18.59	0.00
ZMAX	493481	15.51	16.34	14.28

ALTERNATIVE 1 25-YEAR 24-HOUR

	JUNC ID	INVT	Z_MAX	T_MAX
ZMAX	490000	24.23	28.42	23.25
ZMAX	490004	26.46	28.74	23.32
ZMAX	490002	20.93	28.40	23.22
ZMAX	490008	27.00	28.75	30.02
ZMAX	490010	26.16	28.77	27.03
ZMAX	490020	24.36	28.66	32.30
ZMAX	490030	26.46	28.67	26.00
ZMAX	490040	29.00	30.43	26.53
ZMAX	490050	25.16	28.78	15.58
ZMAX	490070	25.96	29.86	23.30
ZMAX	490071	29.00	30.10	14.08
ZMAX	490072	27.00	28.61	27.35
ZMAX	490073	30.00	32.38	13.73
ZMAX	490080	27.66	30.09	20.65
ZMAX	490090	28.00	31.09	17.40
ZMAX	490100	29.00	29.86	23.38
ZMAX	490110	26.16	30.42	21.98
ZMAX	490120	30.64	33.28	87.85
ZMAX	490130	28.96	33.31	87.83
ZMAX	490140	29.26	31.82	240.00
ZMAX	490141	31.00	32.77	26.40
ZMAX	490150	29.89	34.11	86.20
ZMAX	490160	29.77	35.55	76.17
ZMAX	490170	35.00	38.95	18.53
ZMAX	490180	32.66	38.72	29.67
ZMAX	490181	33.75	38.72	29.78
ZMAX	490200	36.66	38.92	14.87
ZMAX	490210	36.29	38.67	18.67
ZMAX	490211	39.00	40.68	15.37
ZMAX	490220	40.04	42.87	15.73
ZMAX	490221	42.00	45.25	24.38
ZMAX	490230	39.95	41.46	25.25
ZMAX	490240	26.36	31.08	20.87
ZMAX	490250	29.00	33.11	18.93
ZMAX	490251	33.00	35.73	29.92
ZMAX	490260	31.16	34.72	19.57
ZMAX	490261	34.00	36.25	13.68
ZMAX	490263	34.00	35.98	28.08
ZMAX	490264	33.00	35.25	19.08
ZMAX	490266	34.00	36.12	16.08
ZMAX	490270	35.00	38.99	14.97
ZMAX	490280	32.70	35.73	29.92
ZMAX	490281	32.70	35.73	29.90
ZMAX	490290	31.00	34.93	16.10
ZMAX	490300	31.86	34.84	17.57
ZMAX	490310	33.00	37.13	17.63
ZMAX	490320	34.00	37.98	16.77
ZMAX	490321	36.00	38.60	24.48
ZMAX	490330	37.00	38.74	15.72
ZMAX	490340	35.00	37.94	15.93
ZMAX	490350	36.00	38.77	15.67
ZMAX	490370	33.96	36.43	57.00
ZMAX	490375	35.00	38.61	54.25
ZMAX	490390	34.56	38.71	19.92
ZMAX	490391	36.80	38.00	21.57
ZMAX	490392	36.40	37.07	15.38
ZMAX	490400	37.00	39.01	16.07
ZMAX	490401	37.00	39.71	25.98
ZMAX	490410	35.46	38.61	54.18
ZMAX	490411	36.00	38.61	54.30
ZMAX	490420	35.00	40.76	48.58
ZMAX	490421	39.00	40.16	28.50
ZMAX	490422	39.00	41.18	16.93
ZMAX	490425	38.00	40.76	49.17
ZMAX	490430	35.47	41.32	28.23
ZMAX	490440	40.00	43.49	26.10

ALTERNATIVE 1 25-YEAR 24-HOUR

ZMAX	490450	39.00	40.86	25.57
ZMAX	490451	39.00	40.57	63.10
ZMAX	490453	39.00	40.57	63.08
ZMAX	490455	39.00	40.77	18.40
ZMAX	490460	43.00	46.56	27.58
ZMAX	490470	40.00	42.50	36.23
ZMAX	490480	39.67	42.50	36.18
ZMAX	490490	40.38	42.78	21.83
ZMAX	490500	41.00	45.04	35.87
ZMAX	490510	49.00	51.19	17.32
ZMAX	490520	43.47	49.71	24.33
ZMAX	490530	51.00	54.87	82.32
ZMAX	490535	56.47	58.48	15.63
ZMAX	490540	56.00	58.76	15.58
ZMAX	490550	48.00	49.84	16.68
ZMAX	490555	48.07	52.12	13.70
ZMAX	490560	49.00	50.03	16.08
ZMAX	490580	35.47	41.48	28.00
ZMAX	490590	48.37	49.84	25.68
ZMAX	490600	42.54	44.75	15.92
ZMAX	490610	39.77	42.47	26.28
ZMAX	490612	42.00	44.27	15.28
ZMAX	490620	41.70	43.14	15.70
ZMAX	490621	44.00	45.43	18.08
ZMAX	490630	42.17	45.13	22.68
ZMAX	490637	41.53	43.06	14.32
ZMAX	490638	44.12	44.62	24.58
ZMAX	490639	48.72	49.71	15.05
ZMAX	490640	37.57	41.57	26.95
ZMAX	490641	44.00	48.12	24.27
ZMAX	490642	45.16	48.40	16.60
ZMAX	490643	39.87	45.63	16.23
ZMAX	490644	47.67	49.63	15.20
ZMAX	490645	48.67	51.72	14.87
ZMAX	490646	41.53	47.77	14.02
ZMAX	490650	43.27	45.90	17.90
ZMAX	490651	48.16	50.96	16.93
ZMAX	490652	43.47	46.34	14.20
ZMAX	490654	46.00	48.44	17.00
ZMAX	490655	46.55	48.90	14.03
ZMAX	490659	45.57	49.12	15.45
ZMAX	490660	39.87	47.60	15.55
ZMAX	490661	45.57	50.45	15.18
ZMAX	490670	45.37	49.21	15.73
ZMAX	490675	41.87	49.03	15.62
ZMAX	490680	47.11	50.23	16.72
ZMAX	490690	45.49	49.30	15.95
ZMAX	490700	53.74	59.45	29.95
ZMAX	490710	47.96	52.70	27.10
ZMAX	490711	52.00	54.53	16.28
ZMAX	490720	50.00	52.67	27.00
ZMAX	490730	50.23	53.77	26.23
ZMAX	490740	49.64	54.17	16.68
ZMAX	490742	58.00	59.70	28.00
ZMAX	490743	48.76	54.22	17.32
ZMAX	490744	49.87	54.22	17.32
ZMAX	490745	57.00	59.70	28.00
ZMAX	490746	57.00	60.23	26.48
ZMAX	490750	51.30	54.18	17.95
ZMAX	490751	55.00	56.59	25.63
ZMAX	490760	50.95	54.43	24.75
ZMAX	490770	51.91	55.55	26.07
ZMAX	490771	55.00	56.66	25.73
ZMAX	490772	56.00	57.91	26.25
ZMAX	490773	56.00	59.07	25.82
ZMAX	490776	56.00	57.62	25.05
ZMAX	490779	55.00	57.37	16.63

ALTERNATIVE 1 25-YEAR 24-HOUR

ZMAX	490780	54.21	57.67	22.25
ZMAX	490790	53.17	55.58	28.32
ZMAX	490791	56.00	58.61	27.17
ZMAX	490792	56.00	58.35	25.97
ZMAX	490794	56.00	57.67	29.38
ZMAX	490795	56.00	57.44	27.33
ZMAX	490800	53.17	55.96	14.97
ZMAX	490801	55.00	57.44	16.42
ZMAX	490802	56.00	58.00	25.58
ZMAX	490803	57.00	58.52	27.98
ZMAX	490804	56.00	58.52	27.70
ZMAX	490900	53.67	55.58	28.42
ZMAX	491010	22.06	25.52	14.12
ZMAX	491019	26.44	27.85	18.53
ZMAX	491020	26.14	29.05	16.60
ZMAX	491021	26.00	29.05	17.78
ZMAX	491022	27.07	29.04	17.30
ZMAX	491040	23.16	25.71	14.08
ZMAX	491041	26.86	29.46	13.87
ZMAX	491042	27.66	28.87	16.80
ZMAX	491043	27.17	28.78	16.83
ZMAX	491044	27.66	29.37	13.92
ZMAX	491060	25.96	29.82	63.60
ZMAX	491080	25.66	30.05	63.60
ZMAX	491100	28.96	31.12	62.93
ZMAX	491102	29.00	31.46	13.23
ZMAX	491120	27.86	31.87	84.13
ZMAX	491121	29.25	32.32	29.87
ZMAX	491122	32.00	33.38	13.42
ZMAX	491123	32.00	33.78	17.00
ZMAX	491140	29.62	32.47	29.55
ZMAX	491160	30.66	33.39	16.55
ZMAX	491180	32.00	35.42	26.15
ZMAX	491200	34.46	37.36	15.20
ZMAX	491220	36.97	38.44	19.33
ZMAX	491221	33.05	36.58	15.85
ZMAX	491222	36.80	38.95	13.12
ZMAX	491223	34.39	36.59	15.83
ZMAX	491240	31.00	33.19	27.75
ZMAX	491260	29.00	31.91	41.52
ZMAX	491280	29.00	32.00	38.45
ZMAX	491285	30.77	39.04	14.15
ZMAX	491300	29.00	31.92	41.52
ZMAX	491302	33.00	36.56	16.10
ZMAX	491320	32.90	36.55	15.93
ZMAX	491340	29.17	32.95	42.82
ZMAX	491344	36.00	38.48	27.60
ZMAX	491342	31.36	34.15	14.47
ZMAX	491360	33.97	36.88	16.73
ZMAX	491380	31.36	35.65	16.87
ZMAX	491382	33.00	33.59	14.38
ZMAX	491384	30.00	32.34	19.10
ZMAX	491387	34.17	39.59	25.35
ZMAX	491388	34.17	41.26	23.77
ZMAX	491390	36.63	39.63	15.52
ZMAX	491391	35.17	39.68	25.27
ZMAX	491393	42.00	45.45	23.05
ZMAX	491394	36.67	40.94	15.98
ZMAX	491395	35.27	39.68	25.27
ZMAX	491396	38.00	41.23	25.05
ZMAX	491397	32.07	39.50	25.43
ZMAX	491398	42.00	44.13	19.02
ZMAX	491399	38.00	41.28	23.77
ZMAX	491400	33.27	38.16	25.80
ZMAX	491401	36.77	42.43	14.37
ZMAX	491402	32.17	39.56	25.02
ZMAX	491404	38.96	41.29	23.82

ALTERNATIVE 1 25-YEAR 24-HOUR

ZMAX	491406	36.77	40.95	15.97
ZMAX	491407	32.17	39.52	25.22
ZMAX	491392	43.00	47.53	19.02
ZMAX	491403	45.00	48.19	18.73
ZMAX	491440	38.17	39.98	20.50
ZMAX	491441	38.54	39.98	20.45
ZMAX	491460	30.71	36.68	14.35
ZMAX	491465	31.27	36.50	25.53
ZMAX	491480	33.87	36.84	13.53
ZMAX	491500	30.00	36.55	27.15
ZMAX	491501	31.17	36.54	27.22
ZMAX	491502	36.00	38.05	24.28
ZMAX	491520	38.15	41.52	13.77
ZMAX	491540	41.00	44.22	16.58
ZMAX	491541	42.00	46.58	27.38
ZMAX	491452	42.00	44.02	19.80
ZMAX	491453	37.18	40.18	13.47
ZMAX	491560	41.00	41.97	29.05
ZMAX	491561	38.00	42.12	29.67
ZMAX	491562	44.00	45.31	30.95
ZMAX	491563	39.00	42.12	29.67
ZMAX	491580	36.55	38.25	240.00
ZMAX	491600	39.73	42.59	159.15
ZMAX	491620	45.57	47.10	27.02
ZMAX	491621	48.00	50.63	27.65
ZMAX	490232	44.00	46.68	15.08
ZMAX	490431	41.00	44.60	26.55
ZMAX	490449	41.00	43.73	16.33
ZMAX	490457	39.00	40.79	18.67
ZMAX	490491	47.00	50.31	219.30
ZMAX	490492	47.00	51.03	17.72
ZMAX	490501	46.00	49.01	13.98
ZMAX	490511	48.00	50.60	28.05
ZMAX	490561	57.00	58.80	27.85
ZMAX	490581	44.00	46.11	14.50
ZMAX	490582	50.00	52.16	14.25
ZMAX	490584	50.00	52.32	25.10
ZMAX	490587	53.00	57.25	14.03
ZMAX	490701	54.00	58.71	15.35
ZMAX	490702	57.00	60.53	15.67
ZMAX	490703	53.74	55.40	14.15
ZMAX	490704	56.00	60.69	13.47
ZMAX	490713	52.00	54.37	19.92
ZMAX	490741	58.00	59.18	28.28
ZMAX	490762	56.00	59.03	25.53
ZMAX	490781	58.00	62.09	17.28
ZMAX	491274	31.22	39.06	14.17
ZMAX	491284	33.92	36.96	14.38
ZMAX	491389	39.00	40.60	20.42
ZMAX	491700	23.00	27.53	20.18
ZMAX	491701	9.70	25.35	29.83
ZMAX	491702	55.00	57.51	32.57
ZMAX	491703	25.00	27.50	15.93
ZMAX	491704	56.00	58.78	15.47
ZMAX	491705	55.80	57.51	32.57
ZMAX	491706	48.90	51.94	27.80
ZMAX	491707	45.00	46.96	30.25
ZMAX	491708	36.00	38.59	24.65
ZMAX	491709	37.00	39.24	15.80
ZMAX	491710	27.00	28.89	15.88
ZMAX	491711	24.00	26.41	25.53
ZMAX	491712	30.33	34.47	29.73
ZMAX	491713	30.00	34.07	61.32
ZMAX	491714	31.00	32.38	17.52
ZMAX	491715	40.17	42.50	36.30
ZMAX	491716	30.00	34.88	25.02
ZMAX	491717	52.00	55.24	16.38

ALTERNATIVE 1 25-YEAR 24-HOUR

ZMAX	491718	34.00	36.55	14.83
ZMAX	491719	42.00	46.66	28.32
ZMAX	491720	38.00	40.61	15.87
ZMAX	491721	38.00	40.53	25.87
ZMAX	491722	39.00	39.92	17.15
ZMAX	491723	29.00	37.81	56.38
ZMAX	491724	29.00	34.88	24.98
ZMAX	491725	33.00	34.40	16.27
ZMAX	491728	30.00	35.21	15.82
ZMAX	491729	27.00	31.35	24.37
ZMAX	491730	26.00	29.87	18.22
ZMAX	491737	38.00	38.64	15.87
ZMAX	491740	37.00	38.62	15.67
ZMAX	491745	37.00	39.14	17.67
ZMAX	491746	37.00	39.08	26.35
ZMAX	491750	44.00	46.32	27.67
ZMAX	491753	49.00	51.45	21.95
ZMAX	490574	41.77	46.00	16.02
ZMAX	491405	42.00	44.60	17.08
ZMAX	490714	52.00	54.56	16.50
ZMAX	490753	51.00	54.46	29.98
ZMAX	491224	39.00	42.78	28.87
ZMAX	491225	41.50	43.96	14.92
ZMAX	491759	39.00	40.68	22.40
ZMAX	491760	39.00	40.61	22.92
ZMAX	491764	38.00	40.38	24.43
ZMAX	491768	38.00	40.29	24.43
ZMAX	499999	35.85	40.24	24.45
ZMAX	499998	35.80	40.22	24.43
ZMAX	499997	35.00	36.00	24.42
ZMAX	491002	30.84	34.07	61.32
ZMAX	491001	28.00	34.07	61.28
ZMAX	100000	99.00	99.00	0.00
ZMAX	100001	99.00	99.00	0.00
ZMAX	100002	99.00	99.00	0.00
ZMAX	100003	99.00	99.00	0.00
ZMAX	100004	99.00	99.00	0.00
ZMAX	100005	99.00	99.00	0.00
ZMAX	100006	99.00	99.00	0.00
ZMAX	100007	99.00	99.00	0.00
ZMAX	100008	99.00	99.00	0.00
ZMAX	100009	99.00	99.00	0.00
ZMAX	100010	99.00	99.00	0.00
ZMAX	100011	99.00	99.00	0.00
ZMAX	100012	99.00	99.00	0.00
ZMAX	100013	99.00	99.00	0.00
ZMAX	100014	99.00	99.00	0.00
ZMAX	100015	99.00	99.00	0.00
ZMAX	100016	99.00	99.00	0.00
ZMAX	100017	99.00	99.00	0.00
ZMAX	100018	99.00	99.00	0.00
ZMAX	100019	99.00	99.00	0.00
ZMAX	100020	99.00	99.00	0.00
ZMAX	100021	99.00	99.00	0.00
ZMAX	100022	99.00	99.00	0.00
ZMAX	100023	99.00	99.00	0.00
ZMAX	100024	99.00	99.00	0.00
ZMAX	100025	99.00	99.00	0.00
ZMAX	100026	99.00	99.00	0.00
ZMAX	100027	99.00	99.00	0.00
ZMAX	100028	99.00	99.00	0.00
ZMAX	100029	99.00	99.00	0.00
ZMAX	100030	99.00	99.00	0.00
ZMAX	100031	99.00	99.00	0.00
ZMAX	100032	99.00	99.00	0.00
ZMAX	100033	99.00	99.00	0.00
ZMAX	100034	99.00	99.00	0.00

ALTERNATIVE 1 25-YEAR 24-HOUR

ZMAX	100035	99.00	99.00	0.00
ZMAX	100036	99.00	99.00	0.00
ZMAX	100037	99.00	99.00	0.00
ZMAX	100038	99.00	99.00	0.00
ZMAX	100039	99.00	99.00	0.00
ZMAX	100040	99.00	99.00	0.00
ZMAX	493010	17.00	23.49	25.48
ZMAX	493020	20.00	23.04	18.10
ZMAX	493030	18.00	24.47	13.05
ZMAX	493040	17.00	22.33	17.12
ZMAX	493060	21.00	21.50	13.27
ZMAX	493070	19.00	26.94	13.57
ZMAX	493090	18.00	23.45	25.08
ZMAX	493100	20.00	21.15	12.67
ZMAX	493110	18.00	20.02	12.90
ZMAX	493120	18.00	19.99	0.00
ZMAX	493130	17.00	20.16	12.70
ZMAX	493140	16.00	18.79	13.38
ZMAX	493150	16.00	19.40	13.03
ZMAX	493180	18.00	24.21	14.08
ZMAX	493185	19.00	24.19	14.08
ZMAX	493190	17.00	19.35	12.98
ZMAX	493195	17.00	20.16	13.05
ZMAX	493200	18.00	20.10	24.20
ZMAX	493210	18.00	19.27	12.98
ZMAX	493215	19.00	21.01	20.03
ZMAX	493220	16.00	19.14	13.10
ZMAX	493230	15.50	18.79	13.38
ZMAX	493240	16.00	19.33	27.43
ZMAX	493250	17.00	24.21	14.08
ZMAX	493260	21.00	24.19	13.65
ZMAX	493270	19.00	24.18	13.65
ZMAX	493280	19.00	23.09	13.00
ZMAX	493290	19.00	22.29	13.02
ZMAX	493310	17.00	23.87	23.68
ZMAX	493320	17.00	20.10	24.18
ZMAX	493330	17.00	20.06	24.42
ZMAX	493340	16.33	20.04	24.22
ZMAX	493350	15.50	17.76	13.03
ZMAX	493360	13.00	18.00	0.00
ZMAX	493370	14.61	18.28	13.85
ZMAX	493380	14.50	17.53	14.83
ZMAX	493390	14.50	18.09	13.43
ZMAX	493400	13.50	17.54	14.80
ZMAX	493410	12.50	17.53	14.82
ZMAX	493420	13.50	16.28	0.03
ZMAX	493430	12.44	15.94	0.07
ZMAX	493440	15.50	19.33	27.43
ZMAX	493450	18.00	19.15	14.38
ZMAX	493470	16.00	19.14	24.67
ZMAX	493480	15.50	19.19	24.62
ZMAX	493500	12.27	16.59	14.17
ZMAX	493505	12.27	15.47	16.03
ZMAX	493520	11.76	14.62	15.47
ZMAX	493525	11.00	14.57	15.35
ZMAX	493530	14.50	17.29	13.67
ZMAX	493535	15.00	17.29	13.67
ZMAX	493540	13.50	15.99	0.00
ZMAX	493545	9.65	14.55	15.30
ZMAX	493550	14.50	15.24	12.67
ZMAX	493555	13.50	14.88	13.63
ZMAX	494010	24.80	26.00	0.00
ZMAX	494020	22.90	25.59	12.67
ZMAX	494025	20.00	21.25	12.73
ZMAX	494030	22.00	22.74	13.00
ZMAX	494040	19.00	20.56	13.03
ZMAX	494045	18.70	20.56	13.03

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ZMAX	494050	20.00	25.00	0.00
ZMAX	494060	25.00	26.00	0.00
ZMAX	494070	18.00	19.88	13.68
ZMAX	494072	19.00	22.07	13.53
ZMAX	494074	20.00	21.08	12.73
ZMAX	494076	19.00	21.08	12.72
ZMAX	494078	21.00	22.18	12.73
ZMAX	494080	18.00	20.17	12.83
ZMAX	494100	17.00	19.08	15.12
ZMAX	494110	15.29	18.10	14.83
ZMAX	494120	18.00	19.32	13.43
ZMAX	494130	17.00	18.57	14.20
ZMAX	494140	14.50	18.56	14.23
ZMAX	494150	15.00	18.10	14.80
ZMAX	494170	18.00	19.89	13.65
ZMAX	494180	17.00	19.64	14.57
ZMAX	494185	17.00	19.77	13.73
ZMAX	494190	17.00	18.71	13.80
ZMAX	494200	15.00	16.97	0.03
ZMAX	494205	17.00	19.05	12.60
ZMAX	494210	14.87	18.80	0.00
ZMAX	494220	15.75	18.22	0.02
ZMAX	494230	16.00	18.12	14.12
ZMAX	494240	15.71	18.39	13.38
ZMAX	494250	16.70	17.98	0.00
ZMAX	495010	20.00	23.23	12.52
ZMAX	495020	15.50	19.33	27.43
ZMAX	495030	15.50	19.33	27.43
ZMAX	495035	19.00	21.09	24.97
ZMAX	495038	17.00	18.17	12.78
ZMAX	495040	16.00	18.70	12.88
ZMAX	495045	15.00	15.88	12.68
ZMAX	495050	15.50	18.89	24.92
ZMAX	495055	15.50	16.83	12.57
ZMAX	495060	14.80	15.87	12.70
ZMAX	495065	14.50	16.26	12.57
ZMAX	495070	11.50	13.58	17.42
ZMAX	495075	11.50	13.23	20.92
ZMAX	495080	13.18	13.99	0.00
ZMAX	495085	13.00	15.04	17.12
ZMAX	495090	11.42	13.34	14.25
ZMAX	495100	15.00	18.57	14.37
ZMAX	495110	14.50	17.09	12.50
ZMAX	495120	13.00	14.23	12.92
ZMAX	495125	14.42	16.36	14.40
ZMAX	495140	14.50	16.81	26.47
ZMAX	495145	14.50	16.81	26.47
ZMAX	495150	13.00	14.24	12.92
ZMAX	495152	12.50	16.09	25.52
ZMAX	495154	12.50	16.02	19.38
ZMAX	495155	12.50	16.02	19.38
ZMAX	495156	12.50	13.49	0.00
ZMAX	495160	12.50	16.03	24.87
ZMAX	495162	13.50	15.57	25.52
ZMAX	495165	13.50	16.01	17.57
ZMAX	495170	12.50	15.75	13.55
ZMAX	495180	10.45	12.63	21.93
ZMAX	495210	12.50	14.68	25.08
ZMAX	495215	12.50	14.23	12.93
ZMAX	495230	8.82	12.33	13.10
ZMAX	495235	10.50	13.88	24.82
ZMAX	495240	8.50	10.99	23.38
ZMAX	495260	13.00	16.05	24.57
ZMAX	495270	12.50	14.22	12.93
ZMAX	495275	11.50	13.22	12.92
ZMAX	495280	10.90	11.27	12.97
ZMAX	495300	13.94	15.75	13.80

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ZMAX	495302	13.90	15.70	13.70
ZMAX	495304	13.31	15.60	13.23
ZMAX	495306	12.73	14.40	13.97
ZMAX	495308	12.18	14.28	14.32
ZMAX	495310	11.49	13.33	13.38
ZMAX	495312	10.92	13.30	13.28
ZMAX	495314	10.43	13.25	20.77
ZMAX	495316	11.80	14.15	12.53
ZMAX	495320	9.75	13.25	20.80
ZMAX	495322	9.64	14.42	15.47
ZMAX	495324	9.44	14.18	15.62
ZMAX	495326	9.30	13.68	16.85
ZMAX	495328	9.43	13.58	17.40
ZMAX	495330	9.20	13.58	17.42
ZMAX	495332	9.02	13.57	17.35
ZMAX	495334	8.90	13.37	18.30
ZMAX	495336	8.72	13.23	20.83
ZMAX	495338	8.53	13.23	20.92
ZMAX	495340	8.40	13.22	20.92
ZMAX	495342	8.23	13.21	20.95
ZMAX	495344	8.04	13.07	21.32
ZMAX	495346	7.85	12.93	21.57
ZMAX	495348	7.66	12.63	21.93
ZMAX	495350	7.47	11.33	22.82
ZMAX	495352	7.34	11.01	23.38
ZMAX	495354	7.26	11.00	23.38
ZMAX	495356	7.19	10.95	23.40
ZMAX	496010	14.50	16.36	14.43
ZMAX	496020	14.50	18.79	0.00
ZMAX	496030	14.50	16.32	0.02
ZMAX	496060	16.60	16.77	12.83
ZMAX	496065	14.00	16.30	14.40
ZMAX	496070	14.00	16.30	14.40
ZMAX	496080	14.20	17.99	0.00
ZMAX	496090	14.00	17.99	0.00
ZMAX	496100	12.50	15.92	14.60
ZMAX	496110	11.00	15.80	14.65
ZMAX	496120	13.00	15.37	20.42
ZMAX	496125	12.00	15.36	20.35
ZMAX	496130	13.00	15.67	14.70
ZMAX	496150	14.00	15.75	14.68
ZMAX	496160	11.00	15.36	20.35
ZMAX	496170	12.00	15.79	14.67
ZMAX	496175	12.00	14.96	14.67
ZMAX	496180	11.00	13.28	14.52
ZMAX	496190	11.00	13.28	14.53
ZMAX	496200	10.50	12.08	15.40
ZMAX	496232	16.00	18.00	0.00
ZMAX	496234	14.00	16.36	0.15
ZMAX	496235	15.00	15.41	0.12
ZMAX	496240	14.28	15.85	0.03
ZMAX	496245	13.50	15.24	13.78
ZMAX	496260	13.50	15.18	13.78
ZMAX	496270	12.50	13.86	13.70
ZMAX	496280	9.50	12.34	13.97
ZMAX	496310	10.50	12.07	15.42
ZMAX	496320	10.50	12.04	15.45
ZMAX	496340	4.43	12.03	15.43
ZMAX	496350	8.50	10.59	25.02
ZMAX	496360	7.50	9.08	13.68
ZMAX	496370	6.50	8.69	18.13
ZMAX	496380	5.50	8.69	18.10
ZMAX	496390	4.41	8.77	17.95
ZMAX	496395	4.50	8.51	18.47
ZMAX	496400	6.50	8.69	18.07
ZMAX	496410	-0.65	8.51	18.47
ZMAX	496420	3.50	8.32	19.47

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ZMAX	496430	5.50	9.18	12.98
ZMAX	496440	5.50	8.34	19.82
ZMAX	496450	3.50	8.34	19.82
ZMAX	496460	5.50	10.10	14.18
ZMAX	496470	3.00	8.34	19.82
ZMAX	496480	6.50	10.06	15.08
ZMAX	496485	7.50	11.00	16.52
ZMAX	496490	3.50	9.02	20.33
ZMAX	496500	6.50	11.00	0.00
ZMAX	496510	4.50	8.50	240.00
ZMAX	496515	4.50	8.34	19.82
ZMAX	496520	5.50	8.34	19.82
ZMAX	496530	5.50	8.34	19.83
ZMAX	496540	6.50	8.34	19.82
ZMAX	496545	4.00	8.34	19.82
ZMAX	496550	4.00	8.34	19.80
ZMAX	496560	3.00	8.34	19.80
ZMAX	496570	5.50	8.32	19.78
ZMAX	496580	7.50	11.01	13.97
ZMAX	496590	4.50	8.51	18.47
ZMAX	496600	-1.88	8.34	19.72
ZMAX	496610	4.50	8.29	19.68
ZMAX	496620	4.50	8.27	19.65
ZMAX	497010	11.00	13.93	13.30
ZMAX	497020	3.50	10.72	23.70
ZMAX	497025	8.50	11.15	12.73
ZMAX	497035	6.50	10.48	13.15
ZMAX	497045	4.50	8.01	13.30
ZMAX	497050	3.50	8.00	13.30
ZMAX	497055	3.50	7.21	22.10
ZMAX	497065	1.88	7.21	22.08
ZMAX	497070	8.50	10.07	12.88
ZMAX	497080	2.06	7.47	20.23
ZMAX	497085	6.50	10.54	23.87
ZMAX	497086	6.32	10.95	23.40
ZMAX	497088	5.89	10.72	23.70
ZMAX	497090	4.32	10.62	23.82
ZMAX	497092	3.75	10.38	23.90
ZMAX	497094	2.75	9.95	23.95
ZMAX	497096	2.30	9.08	23.95
ZMAX	497098	1.85	8.80	23.95
ZMAX	497100	-0.16	7.91	20.72
ZMAX	497102	-1.57	7.79	20.57
ZMAX	497104	-2.19	7.72	20.48
ZMAX	497105	-1.00	7.70	20.47
ZMAX	497106	-1.37	7.45	20.20
ZMAX	497107	-2.07	7.44	20.18
ZMAX	497108	-0.37	7.42	20.18
ZMAX	497109	-4.75	7.43	20.18
ZMAX	497111	-3.66	7.43	20.18
ZMAX	497112	-3.66	7.35	20.18
ZMAX	497113	-5.33	7.23	20.18
ZMAX	497110	-0.19	10.08	17.03
ZMAX	497120	1.50	7.44	20.20
ZMAX	497122	4.50	7.44	20.20
ZMAX	497124	4.00	7.44	20.20
ZMAX	497130	-0.21	8.24	18.58
ZMAX	497140	4.00	7.46	20.23
ZMAX	497150	5.40	7.44	20.18
ZMAX	497160	-1.85	8.26	19.58
ZMAX	497161	-2.25	8.04	19.77
ZMAX	497162	-2.86	7.62	20.08
ZMAX	497170	-6.19	4.31	20.23
ZMAX	500010	6.94	11.25	12.75
ZMAX	500020	8.41	10.31	14.28
ZMAX	500025	6.13	11.05	12.97
ZMAX	500030	5.77	11.04	12.97

ALTERNATIVE 1 25-YEAR 24-HOUR

ZMAX	500040	5.07	10.55	13.05
ZMAX	500050	4.00	9.10	23.95
ZMAX	500110	7.43	11.26	12.82
ZMAX	500120	6.16	10.62	23.97
ZMAX	500130	8.00	11.90	13.58
ZMAX	500140	6.39	10.64	24.60
ZMAX	500210	4.00	10.65	24.60
ZMAX	500220	6.91	11.27	12.73
ZMAX	500300	5.00	10.08	12.68
ZMAX	9498000	-6.69	2.96	0.00
ZMAX	9496630	12.00	12.00	0.00
ZMAX	9493020	20.00	20.00	0.00
ZMAX	9493060	22.50	22.50	0.00
ZMAX	9493190	19.00	19.00	0.00
ZMAX	9493140	19.98	19.98	0.00
ZMAX	9493150	19.70	19.70	0.00
ZMAX	9493240	19.00	19.00	0.00
ZMAX	9495030	17.48	17.48	0.00
ZMAX	9495010	23.20	23.20	0.00
ZMAX	9495085	15.10	15.10	0.00
ZMAX	9495140	16.00	16.00	0.00
ZMAX	9495145	16.00	16.00	0.00
ZMAX	9495160	15.50	15.50	0.00
ZMAX	9496320	11.00	11.00	0.00
ZMAX	9496260	14.00	14.00	0.00
ZMAX	9494250	18.00	18.00	0.00
ZMAX	9494190	18.50	18.50	0.00
ZMAX	100043	99.00	99.00	0.00
ZMAX	100044	99.00	99.00	0.00
ZMAX	100045	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100047	99.00	99.00	0.00
ZMAX	100048	99.00	99.00	0.00
ZMAX	100049	99.00	99.00	0.00
ZMAX	100050	99.00	99.00	0.00
ZMAX	100051	99.00	99.00	0.00
ZMAX	100052	99.00	99.00	0.00
ZMAX	100053	99.00	99.00	0.00
ZMAX	100054	99.00	99.00	0.00
ZMAX	100055	99.00	99.00	0.00
ZMAX	100056	99.00	99.00	0.00
ZMAX	100057	99.00	99.00	0.00
ZMAX	100058	99.00	99.00	0.00
ZMAX	100059	99.00	99.00	0.00
ZMAX	100060	99.00	99.00	0.00
ZMAX	100061	99.00	99.00	0.00
ZMAX	100062	99.00	99.00	0.00
ZMAX	100063	99.00	99.00	0.00
ZMAX	100064	99.00	99.00	0.00
ZMAX	100065	99.00	99.00	0.00
ZMAX	100066	99.00	99.00	0.00
ZMAX	100067	99.00	99.00	0.00
ZMAX	100068	99.00	99.00	0.00
ZMAX	100069	99.00	99.00	0.00
ZMAX	100070	99.00	99.00	0.00
ZMAX	100071	99.00	99.00	0.00
ZMAX	100072	99.00	99.00	0.00
ZMAX	100073	99.00	99.00	0.00
ZMAX	100074	99.00	99.00	0.00
ZMAX	100075	99.00	99.00	0.00
ZMAX	100076	99.00	99.00	0.00
ZMAX	100077	99.00	99.00	0.00
ZMAX	100078	99.00	99.00	0.00
ZMAX	100079	99.00	99.00	0.00
ZMAX	100080	99.00	99.00	0.00
ZMAX	100081	99.00	99.00	0.00

ALTERNATIVE 1 25-YEAR 24-HOUR

ZMAX	100082	99.00	99.00	0.00
ZMAX	100083	99.00	99.00	0.00
ZMAX	100084	99.00	99.00	0.00
ZMAX	100085	99.00	99.00	0.00
ZMAX	100086	99.00	99.00	0.00
ZMAX	100087	99.00	99.00	0.00
ZMAX	100088	99.00	99.00	0.00
ZMAX	100089	99.00	99.00	0.00
ZMAX	493341	16.33	18.59	0.00
ZMAX	493481	15.51	16.59	14.18

Alternative 2 Weirs

ALTERNATIVE 2 5-YEAR 24-HOUR

	JUNC ID	INVT	Z_MAX	T_MAX
ZMAX	490000	24.23	26.46	0.00
ZMAX	490004	26.46	27.84	25.85
ZMAX	490002	20.93	26.14	29.05
ZMAX	490008	27.00	28.09	29.87
ZMAX	490010	26.16	28.19	39.67
ZMAX	490020	24.36	28.20	26.73
ZMAX	490030	26.46	28.14	25.25
ZMAX	490040	29.00	29.90	26.57
ZMAX	490050	25.16	28.39	15.43
ZMAX	490070	25.96	29.13	26.62
ZMAX	490071	29.00	29.91	14.60
ZMAX	490072	27.00	28.02	27.30
ZMAX	490073	30.00	32.31	14.45
ZMAX	490080	27.66	29.13	27.27
ZMAX	490090	28.00	30.71	27.40
ZMAX	490100	29.00	29.69	14.10
ZMAX	490110	26.16	29.70	25.18
ZMAX	490120	30.64	33.01	69.35
ZMAX	490130	28.96	33.02	69.30
ZMAX	490140	29.26	31.53	240.00
ZMAX	490141	31.00	32.13	26.37
ZMAX	490150	29.89	33.27	67.15
ZMAX	490160	29.77	34.52	59.60
ZMAX	490170	35.00	38.56	26.23
ZMAX	490180	32.66	37.49	26.72
ZMAX	490181	33.75	37.49	26.82
ZMAX	490200	36.66	38.56	26.23
ZMAX	490210	36.29	38.35	0.00
ZMAX	490211	39.00	40.60	17.20
ZMAX	490220	40.04	42.02	15.35
ZMAX	490221	42.00	44.50	30.53
ZMAX	490230	39.95	40.97	25.65
ZMAX	490240	26.36	30.28	24.42
ZMAX	490250	29.00	32.36	21.48
ZMAX	490251	33.00	34.78	29.83
ZMAX	490260	31.16	33.28	16.17
ZMAX	490261	34.00	36.08	13.83
ZMAX	490263	34.00	35.25	28.05
ZMAX	490264	33.00	34.83	24.37
ZMAX	490266	34.00	35.80	16.42
ZMAX	490270	35.00	37.74	14.40
ZMAX	490280	32.70	34.78	29.83
ZMAX	490281	32.70	34.78	29.75
ZMAX	490290	31.00	34.39	16.30
ZMAX	490300	31.86	33.17	13.50
ZMAX	490310	33.00	36.26	18.32
ZMAX	490320	34.00	37.76	20.60
ZMAX	490321	36.00	38.24	37.90
ZMAX	490330	37.00	38.66	27.77
ZMAX	490340	35.00	37.83	14.20
ZMAX	490350	36.00	38.67	25.85
ZMAX	490370	33.96	35.92	25.73
ZMAX	490375	35.00	38.08	57.10
ZMAX	490390	34.56	37.97	24.93
ZMAX	490391	36.80	37.26	26.05
ZMAX	490392	36.40	36.82	15.00
ZMAX	490400	37.00	38.89	25.85
ZMAX	490401	37.00	39.37	25.98
ZMAX	490410	35.46	38.08	57.08
ZMAX	490411	36.00	38.08	57.10
ZMAX	490420	35.00	40.20	50.95
ZMAX	490421	39.00	39.74	28.53
ZMAX	490422	39.00	41.05	25.17
ZMAX	490425	38.00	40.20	51.63
ZMAX	490430	35.47	40.69	26.00
ZMAX	490440	40.00	42.84	26.75

ALTERNATIVE 2 5-YEAR 24-HOUR

ZMAX	490450	39.00	40.58	57.92
ZMAX	490451	39.00	40.14	29.65
ZMAX	490453	39.00	40.14	31.75
ZMAX	490455	39.00	40.60	21.83
ZMAX	490460	43.00	45.73	27.53
ZMAX	490470	40.00	41.74	25.50
ZMAX	490480	39.67	42.00	0.00
ZMAX	490490	40.38	42.30	19.83
ZMAX	490500	41.00	44.61	59.72
ZMAX	490510	49.00	50.73	17.83
ZMAX	490520	43.47	48.11	27.60
ZMAX	490530	51.00	54.16	83.12
ZMAX	490535	56.47	57.94	16.12
ZMAX	490540	56.00	58.17	16.05
ZMAX	490550	48.00	49.28	17.52
ZMAX	490555	48.07	51.02	13.92
ZMAX	490560	49.00	49.74	16.27
ZMAX	490580	35.47	40.81	25.98
ZMAX	490590	48.37	49.31	26.27
ZMAX	490600	42.54	44.45	25.78
ZMAX	490610	39.77	41.38	27.08
ZMAX	490612	42.00	44.20	27.75
ZMAX	490620	41.70	42.88	16.80
ZMAX	490621	44.00	45.18	27.30
ZMAX	490630	42.17	44.53	20.53
ZMAX	490637	41.53	42.43	14.78
ZMAX	490638	44.12	44.50	24.82
ZMAX	490639	48.72	49.21	14.53
ZMAX	490640	37.57	40.86	25.37
ZMAX	490641	44.00	46.73	24.48
ZMAX	490642	45.16	47.24	16.32
ZMAX	490643	39.87	44.93	16.70
ZMAX	490644	47.67	49.21	14.60
ZMAX	490645	48.67	51.27	24.60
ZMAX	490646	41.53	47.31	14.48
ZMAX	490650	43.27	45.09	19.27
ZMAX	490651	48.16	50.18	16.65
ZMAX	490652	43.47	46.22	13.98
ZMAX	490654	46.00	48.13	26.82
ZMAX	490655	46.55	48.83	14.98
ZMAX	490659	45.57	48.11	14.32
ZMAX	490660	39.87	46.11	14.37
ZMAX	490661	45.57	49.72	16.63
ZMAX	490670	45.37	48.30	14.27
ZMAX	490675	41.87	48.11	14.30
ZMAX	490680	47.11	49.55	16.67
ZMAX	490690	45.49	48.39	14.18
ZMAX	490700	53.74	58.68	29.58
ZMAX	490710	47.96	52.09	27.78
ZMAX	490711	52.00	54.43	21.28
ZMAX	490720	50.00	52.14	27.97
ZMAX	490730	50.23	52.56	25.45
ZMAX	490740	49.64	53.25	17.57
ZMAX	490742	58.00	59.32	14.05
ZMAX	490743	48.76	53.27	18.00
ZMAX	490744	49.87	53.27	18.00
ZMAX	490745	57.00	59.15	29.72
ZMAX	490746	57.00	59.23	26.50
ZMAX	490750	51.30	53.51	16.03
ZMAX	490751	55.00	56.23	25.60
ZMAX	490760	50.95	53.93	20.07
ZMAX	490770	51.91	55.20	27.10
ZMAX	490771	55.00	56.06	25.68
ZMAX	490772	56.00	57.26	26.22
ZMAX	490773	56.00	58.54	25.82
ZMAX	490776	56.00	57.12	27.18
ZMAX	490779	55.00	57.10	24.95

ALTERNATIVE 2 5-YEAR 24-HOUR

ZMAX	490780	54.21	57.06	20.42
ZMAX	490790	53.17	55.16	41.82
ZMAX	490791	56.00	57.79	27.22
ZMAX	490792	56.00	57.63	26.03
ZMAX	490794	56.00	57.24	29.38
ZMAX	490795	56.00	56.98	27.40
ZMAX	490800	53.17	55.62	14.60
ZMAX	490801	55.00	57.11	25.08
ZMAX	490802	56.00	57.35	25.72
ZMAX	490803	57.00	57.89	28.22
ZMAX	490804	56.00	57.89	27.72
ZMAX	490900	53.67	55.16	41.90
ZMAX	491010	22.06	24.94	14.25
ZMAX	491019	26.44	27.43	17.70
ZMAX	491020	26.14	28.53	16.78
ZMAX	491021	26.00	28.54	17.08
ZMAX	491022	27.07	28.53	16.93
ZMAX	491040	23.16	25.04	14.20
ZMAX	491041	26.86	29.01	13.92
ZMAX	491042	27.66	28.61	16.12
ZMAX	491043	27.17	28.39	16.33
ZMAX	491044	27.66	28.94	13.97
ZMAX	491060	25.96	28.98	116.38
ZMAX	491080	25.66	29.01	116.38
ZMAX	491100	28.96	30.31	96.63
ZMAX	491102	29.00	31.08	13.28
ZMAX	491120	27.86	30.30	78.73
ZMAX	491121	29.25	32.22	42.45
ZMAX	491122	32.00	33.30	13.50
ZMAX	491123	32.00	33.51	17.65
ZMAX	491140	29.62	32.27	42.22
ZMAX	491160	30.66	32.57	17.13
ZMAX	491180	32.00	34.31	25.73
ZMAX	491200	34.46	36.56	14.65
ZMAX	491220	36.97	38.07	19.53
ZMAX	491221	33.05	36.27	14.00
ZMAX	491222	36.80	38.34	13.12
ZMAX	491223	34.39	36.28	13.98
ZMAX	491240	31.00	32.45	27.82
ZMAX	491260	29.00	31.14	86.48
ZMAX	491280	29.00	31.31	84.15
ZMAX	491285	30.77	38.29	14.47
ZMAX	491300	29.00	31.31	84.15
ZMAX	491302	33.00	36.22	18.52
ZMAX	491320	32.90	36.23	14.03
ZMAX	491340	29.17	31.70	35.60
ZMAX	491344	36.00	37.90	27.73
ZMAX	491342	31.36	34.00	14.92
ZMAX	491360	33.97	36.54	16.25
ZMAX	491380	31.36	35.21	17.23
ZMAX	491382	33.00	33.42	14.47
ZMAX	491384	30.00	32.09	26.75
ZMAX	491387	34.17	38.94	49.35
ZMAX	491388	34.17	40.79	26.65
ZMAX	491390	36.63	38.94	49.25
ZMAX	491391	35.17	38.97	49.28
ZMAX	491393	42.00	44.71	19.67
ZMAX	491394	36.67	40.02	17.42
ZMAX	491395	35.27	38.97	49.27
ZMAX	491396	38.00	40.30	27.32
ZMAX	491397	32.07	38.93	49.30
ZMAX	491398	42.00	44.02	41.60
ZMAX	491399	38.00	40.79	26.65
ZMAX	491400	33.27	35.12	13.50
ZMAX	491401	36.77	42.20	14.83
ZMAX	491402	32.17	38.94	49.27
ZMAX	491404	38.96	40.79	27.17

ALTERNATIVE 2 5-YEAR 24-HOUR

ZMAX	491406	36.77	40.02	17.37
ZMAX	491407	32.17	38.93	49.38
ZMAX	491392	43.00	47.25	27.48
ZMAX	491403	45.00	48.01	29.82
ZMAX	491440	38.17	39.66	27.67
ZMAX	491441	38.54	39.66	27.65
ZMAX	491460	30.71	35.80	24.70
ZMAX	491465	31.27	35.83	25.22
ZMAX	491480	33.87	36.50	13.55
ZMAX	491500	30.00	35.85	26.38
ZMAX	491501	31.17	35.84	26.03
ZMAX	491502	36.00	37.76	27.88
ZMAX	491520	38.15	40.01	13.38
ZMAX	491540	41.00	43.84	27.87
ZMAX	491541	42.00	45.46	27.55
ZMAX	491452	42.00	43.55	26.18
ZMAX	491453	37.18	39.41	13.48
ZMAX	491560	41.00	41.59	28.95
ZMAX	491561	38.00	41.35	29.92
ZMAX	491562	44.00	44.85	31.13
ZMAX	491563	39.00	41.35	29.92
ZMAX	491580	36.55	37.57	28.97
ZMAX	491600	39.73	41.37	240.00
ZMAX	491620	45.57	46.63	28.27
ZMAX	491621	48.00	50.20	27.60
ZMAX	490232	44.00	46.41	16.42
ZMAX	490431	41.00	44.07	26.53
ZMAX	490449	41.00	43.29	17.73
ZMAX	490457	39.00	40.61	22.20
ZMAX	490491	47.00	48.42	29.25
ZMAX	490492	47.00	50.25	29.27
ZMAX	490501	46.00	48.82	14.10
ZMAX	490511	48.00	49.65	28.08
ZMAX	490561	57.00	58.11	27.78
ZMAX	490581	44.00	45.94	15.03
ZMAX	490582	50.00	51.82	18.60
ZMAX	490584	50.00	51.51	26.03
ZMAX	490587	53.00	56.61	16.95
ZMAX	490701	54.00	58.55	20.10
ZMAX	490702	57.00	60.42	25.63
ZMAX	490703	53.74	55.00	14.12
ZMAX	490704	56.00	60.39	14.15
ZMAX	490713	52.00	53.82	29.12
ZMAX	490741	58.00	58.74	28.33
ZMAX	490762	56.00	58.18	27.28
ZMAX	490781	58.00	61.75	17.97
ZMAX	491274	31.22	38.40	14.72
ZMAX	491284	33.92	36.06	14.38
ZMAX	491389	39.00	40.35	27.20
ZMAX	491700	23.00	26.12	24.52
ZMAX	491701	9.70	24.05	37.10
ZMAX	491702	55.00	56.74	35.83
ZMAX	491703	25.00	27.31	18.43
ZMAX	491704	56.00	58.66	16.53
ZMAX	491705	55.80	56.74	35.83
ZMAX	491706	48.90	51.25	27.72
ZMAX	491707	45.00	46.40	30.12
ZMAX	491708	36.00	38.27	28.08
ZMAX	491709	37.00	39.09	16.23
ZMAX	491710	27.00	28.65	16.65
ZMAX	491711	24.00	25.42	40.30
ZMAX	491712	30.33	33.33	29.95
ZMAX	491713	30.00	33.34	30.13
ZMAX	491714	31.00	32.02	21.07
ZMAX	491715	40.17	41.74	25.38
ZMAX	491716	30.00	34.36	28.57
ZMAX	491717	52.00	55.10	26.70

ALTERNATIVE 2 5-YEAR 24-HOUR

ZMAX	491718	34.00	36.29	15.75
ZMAX	491719	42.00	45.70	28.52
ZMAX	491720	38.00	40.31	16.47
ZMAX	491721	38.00	39.98	25.93
ZMAX	491722	39.00	39.57	16.95
ZMAX	491723	29.00	37.08	39.95
ZMAX	491724	29.00	34.36	28.88
ZMAX	491725	33.00	33.95	16.62
ZMAX	491728	30.00	34.61	27.77
ZMAX	491729	27.00	30.19	27.33
ZMAX	491730	26.00	29.17	22.00
ZMAX	491737	38.00	38.53	16.62
ZMAX	491740	37.00	38.49	16.32
ZMAX	491745	37.00	38.92	21.35
ZMAX	491746	37.00	38.72	28.12
ZMAX	491750	44.00	45.43	27.72
ZMAX	491753	49.00	50.77	29.85
ZMAX	490574	41.77	45.22	15.65
ZMAX	491405	42.00	44.34	28.37
ZMAX	490714	52.00	54.09	17.12
ZMAX	490753	51.00	53.78	28.50
ZMAX	491224	39.00	41.41	28.83
ZMAX	491225	41.50	43.41	14.97
ZMAX	491759	39.00	40.31	21.92
ZMAX	491760	39.00	40.27	22.13
ZMAX	491764	38.00	40.00	20.45
ZMAX	491768	38.00	39.63	22.73
ZMAX	499999	35.85	39.59	22.75
ZMAX	499998	35.80	39.58	22.72
ZMAX	499997	35.00	35.80	22.72
ZMAX	491002	30.84	33.34	30.13
ZMAX	491001	28.00	33.34	30.07
ZMAX	100000	99.00	99.00	0.00
ZMAX	100001	99.00	99.00	0.00
ZMAX	100002	99.00	99.00	0.00
ZMAX	100003	99.00	99.00	0.00
ZMAX	100004	99.00	99.00	0.00
ZMAX	100005	99.00	99.00	0.00
ZMAX	100006	99.00	99.00	0.00
ZMAX	100007	99.00	99.00	0.00
ZMAX	100008	99.00	99.00	0.00
ZMAX	100009	99.00	99.00	0.00
ZMAX	100010	99.00	99.00	0.00
ZMAX	100011	99.00	99.00	0.00
ZMAX	100012	99.00	99.00	0.00
ZMAX	100013	99.00	99.00	0.00
ZMAX	100014	99.00	99.00	0.00
ZMAX	100015	99.00	99.00	0.00
ZMAX	100016	99.00	99.00	0.00
ZMAX	100017	99.00	99.00	0.00
ZMAX	100018	99.00	99.00	0.00
ZMAX	100019	99.00	99.00	0.00
ZMAX	100020	99.00	99.00	0.00
ZMAX	100021	99.00	99.00	0.00
ZMAX	100022	99.00	99.00	0.00
ZMAX	100023	99.00	99.00	0.00
ZMAX	100024	99.00	99.00	0.00
ZMAX	100025	99.00	99.00	0.00
ZMAX	100026	99.00	99.00	0.00
ZMAX	100027	99.00	99.00	0.00
ZMAX	100028	99.00	99.00	0.00
ZMAX	100029	99.00	99.00	0.00
ZMAX	100030	99.00	99.00	0.00
ZMAX	100031	99.00	99.00	0.00
ZMAX	100032	99.00	99.00	0.00
ZMAX	100033	99.00	99.00	0.00
ZMAX	100034	99.00	99.00	0.00

ALTERNATIVE 2 5-YEAR 24-HOUR

ZMAX	100035	99.00	99.00	0.00
ZMAX	100036	99.00	99.00	0.00
ZMAX	100037	99.00	99.00	0.00
ZMAX	100038	99.00	99.00	0.00
ZMAX	100039	99.00	99.00	0.00
ZMAX	100040	99.00	99.00	0.00
ZMAX	493010	17.00	22.66	25.45
ZMAX	493020	20.00	22.62	27.23
ZMAX	493030	18.00	24.41	13.30
ZMAX	493040	17.00	22.11	21.47
ZMAX	493060	21.00	21.45	13.35
ZMAX	493070	19.00	25.64	13.65
ZMAX	493090	18.00	22.29	25.08
ZMAX	493100	20.00	21.11	12.67
ZMAX	493110	18.00	19.93	12.95
ZMAX	493120	18.00	20.00	0.00
ZMAX	493130	17.00	20.08	13.00
ZMAX	493140	16.00	18.43	13.70
ZMAX	493150	16.00	19.33	13.83
ZMAX	493180	18.00	24.08	14.90
ZMAX	493185	19.00	23.23	18.43
ZMAX	493190	17.00	19.21	13.03
ZMAX	493195	17.00	20.06	13.65
ZMAX	493200	18.00	19.75	13.65
ZMAX	493210	18.00	19.18	13.03
ZMAX	493215	19.00	20.75	25.27
ZMAX	493220	16.00	18.96	13.32
ZMAX	493230	15.50	18.43	13.70
ZMAX	493240	16.00	19.06	14.82
ZMAX	493250	17.00	24.08	14.90
ZMAX	493260	21.00	24.08	14.97
ZMAX	493270	19.00	24.07	14.97
ZMAX	493280	19.00	23.06	13.03
ZMAX	493290	19.00	22.23	15.38
ZMAX	493310	17.00	21.71	29.07
ZMAX	493320	17.00	19.80	0.00
ZMAX	493330	17.00	19.80	13.28
ZMAX	493340	16.33	19.74	13.65
ZMAX	493350	15.50	17.69	13.17
ZMAX	493360	13.00	18.00	0.00
ZMAX	493370	14.61	17.75	13.97
ZMAX	493380	14.50	17.11	16.92
ZMAX	493390	14.50	17.86	13.77
ZMAX	493400	13.50	17.11	16.90
ZMAX	493410	12.50	17.11	16.90
ZMAX	493420	13.50	16.28	0.03
ZMAX	493430	12.44	15.94	0.07
ZMAX	493440	15.50	18.71	28.10
ZMAX	493450	18.00	18.98	14.05
ZMAX	493470	16.00	18.98	14.07
ZMAX	493480	15.50	19.00	14.03
ZMAX	493500	12.27	16.36	14.40
ZMAX	493505	12.27	14.84	16.23
ZMAX	493520	11.76	14.27	17.05
ZMAX	493525	11.00	14.24	17.17
ZMAX	493530	14.50	17.13	16.60
ZMAX	493535	15.00	17.13	16.60
ZMAX	493540	13.50	16.00	0.00
ZMAX	493545	9.65	14.22	17.17
ZMAX	493550	14.50	15.20	12.70
ZMAX	493555	13.50	14.81	12.50
ZMAX	494010	24.80	26.00	0.00
ZMAX	494020	22.90	25.55	12.93
ZMAX	494025	20.00	21.16	12.95
ZMAX	494030	22.00	22.69	13.00
ZMAX	494040	19.00	20.45	13.07
ZMAX	494045	18.70	20.44	13.07

ALTERNATIVE 2 5-YEAR 24-HOUR

ZMAX	494050	20.00	25.00	0.00
ZMAX	494060	25.00	26.00	0.00
ZMAX	494070	18.00	19.71	13.70
ZMAX	494072	19.00	22.01	24.17
ZMAX	494074	20.00	21.05	13.12
ZMAX	494076	19.00	21.05	12.68
ZMAX	494078	21.00	22.12	12.85
ZMAX	494080	18.00	20.11	13.10
ZMAX	494100	17.00	19.06	15.18
ZMAX	494110	15.29	18.60	14.95
ZMAX	494120	18.00	19.22	13.35
ZMAX	494130	17.00	18.66	14.90
ZMAX	494140	14.50	18.65	14.90
ZMAX	494150	15.00	18.62	14.93
ZMAX	494170	18.00	19.72	13.67
ZMAX	494180	17.00	19.60	15.65
ZMAX	494185	17.00	19.56	13.80
ZMAX	494190	17.00	18.34	13.85
ZMAX	494200	15.00	16.97	0.03
ZMAX	494205	17.00	18.99	15.12
ZMAX	494210	14.87	18.80	0.00
ZMAX	494220	15.75	18.22	0.02
ZMAX	494230	16.00	18.09	0.03
ZMAX	494240	15.71	18.22	13.45
ZMAX	494250	16.70	18.00	0.00
ZMAX	495010	20.00	23.20	0.00
ZMAX	495020	15.50	18.71	28.10
ZMAX	495030	15.50	18.71	28.10
ZMAX	495035	19.00	20.34	24.98
ZMAX	495038	17.00	18.10	12.90
ZMAX	495040	16.00	18.63	12.92
ZMAX	495045	15.00	15.77	12.73
ZMAX	495050	15.50	18.34	24.92
ZMAX	495055	15.50	16.79	12.95
ZMAX	495060	14.80	15.76	12.73
ZMAX	495065	14.50	16.15	13.05
ZMAX	495070	11.50	12.84	13.27
ZMAX	495075	11.50	12.50	0.00
ZMAX	495080	13.18	14.00	0.00
ZMAX	495085	13.00	15.02	20.35
ZMAX	495090	11.42	12.99	14.20
ZMAX	495100	15.00	17.34	14.13
ZMAX	495110	14.50	17.04	12.75
ZMAX	495120	13.00	14.12	13.35
ZMAX	495125	14.42	15.96	14.05
ZMAX	495140	14.50	16.55	17.73
ZMAX	495145	14.50	16.39	240.00
ZMAX	495150	13.00	14.12	13.35
ZMAX	495152	12.50	15.08	25.55
ZMAX	495154	12.50	15.43	25.97
ZMAX	495155	12.50	15.43	25.97
ZMAX	495156	12.50	13.50	0.00
ZMAX	495160	12.50	15.34	25.58
ZMAX	495162	13.50	14.84	25.57
ZMAX	495165	13.50	15.49	25.70
ZMAX	495170	12.50	15.70	24.82
ZMAX	495180	10.45	12.48	0.00
ZMAX	495210	12.50	13.90	25.12
ZMAX	495215	12.50	14.12	13.35
ZMAX	495230	8.82	11.69	13.03
ZMAX	495235	10.50	13.33	24.80
ZMAX	495240	8.50	10.26	25.10
ZMAX	495260	13.00	15.50	23.82
ZMAX	495270	12.50	14.11	13.35
ZMAX	495275	11.50	13.10	13.50
ZMAX	495280	10.90	11.14	13.52
ZMAX	495300	13.94	15.45	14.23

ALTERNATIVE 2 5-YEAR 24-HOUR

ZMAX	495302	13.90	15.40	14.25
ZMAX	495304	13.31	15.27	13.30
ZMAX	495306	12.73	14.10	14.50
ZMAX	495308	12.18	14.02	14.78
ZMAX	495310	11.49	12.96	13.53
ZMAX	495312	10.92	12.94	13.42
ZMAX	495314	10.43	12.48	24.20
ZMAX	495316	11.80	14.11	12.53
ZMAX	495320	9.75	12.48	24.22
ZMAX	495322	9.64	13.46	17.53
ZMAX	495324	9.44	13.30	17.68
ZMAX	495326	9.30	12.88	18.67
ZMAX	495328	9.43	12.83	13.47
ZMAX	495330	9.20	12.84	13.27
ZMAX	495332	9.02	12.79	19.52
ZMAX	495334	8.90	12.62	20.83
ZMAX	495336	8.72	12.47	24.22
ZMAX	495338	8.53	12.47	24.25
ZMAX	495340	8.40	12.47	24.23
ZMAX	495342	8.23	12.46	24.38
ZMAX	495344	8.04	12.35	24.67
ZMAX	495346	7.85	12.06	24.62
ZMAX	495348	7.66	11.85	24.75
ZMAX	495350	7.47	10.61	24.95
ZMAX	495352	7.34	10.27	25.08
ZMAX	495354	7.26	10.27	25.02
ZMAX	495356	7.19	10.24	25.10
ZMAX	496010	14.50	16.23	0.12
ZMAX	496020	14.50	18.80	0.00
ZMAX	496030	14.50	16.32	0.02
ZMAX	496060	16.60	16.75	12.83
ZMAX	496065	14.00	16.27	0.10
ZMAX	496070	14.00	16.24	0.12
ZMAX	496080	14.20	18.00	0.00
ZMAX	496090	14.00	18.00	0.00
ZMAX	496100	12.50	15.90	0.07
ZMAX	496110	11.00	15.50	15.93
ZMAX	496120	13.00	15.09	14.60
ZMAX	496125	12.00	14.34	22.33
ZMAX	496130	13.00	15.42	16.02
ZMAX	496150	14.00	15.47	15.98
ZMAX	496160	11.00	14.34	22.33
ZMAX	496170	12.00	15.50	15.97
ZMAX	496175	12.00	14.87	16.00
ZMAX	496180	11.00	13.18	16.45
ZMAX	496190	11.00	13.18	16.45
ZMAX	496200	10.50	11.34	15.88
ZMAX	496232	16.00	18.00	0.00
ZMAX	496234	14.00	16.36	0.15
ZMAX	496235	15.00	15.40	0.12
ZMAX	496240	14.28	15.82	0.03
ZMAX	496245	13.50	15.16	0.13
ZMAX	496260	13.50	15.03	0.30
ZMAX	496270	12.50	13.66	0.28
ZMAX	496280	9.50	12.15	14.28
ZMAX	496310	10.50	11.37	14.30
ZMAX	496320	10.50	11.22	14.27
ZMAX	496340	4.43	10.01	15.27
ZMAX	496350	8.50	9.88	25.07
ZMAX	496360	7.50	8.97	25.27
ZMAX	496370	6.50	8.18	14.23
ZMAX	496380	5.50	8.12	16.57
ZMAX	496390	4.41	8.18	16.45
ZMAX	496395	4.50	7.98	16.70
ZMAX	496400	6.50	8.12	16.55
ZMAX	496410	-0.65	7.98	16.70
ZMAX	496420	3.50	7.02	18.20

ALTERNATIVE 2 5-YEAR 24-HOUR

ZMAX	496430	5.50	9.04	14.10
ZMAX	496440	5.50	7.82	27.10
ZMAX	496450	3.50	7.82	27.10
ZMAX	496460	5.50	9.98	26.00
ZMAX	496470	3.00	7.43	18.97
ZMAX	496480	6.50	8.35	25.10
ZMAX	496485	7.50	10.67	25.40
ZMAX	496490	3.50	8.27	24.98
ZMAX	496500	6.50	11.00	0.00
ZMAX	496510	4.50	7.41	25.10
ZMAX	496515	4.50	7.97	16.62
ZMAX	496520	5.50	7.43	18.97
ZMAX	496530	5.50	7.43	18.98
ZMAX	496540	6.50	7.43	18.97
ZMAX	496545	4.00	7.43	18.95
ZMAX	496550	4.00	7.43	18.95
ZMAX	496560	3.00	7.43	18.93
ZMAX	496570	5.50	7.43	18.97
ZMAX	496580	7.50	10.88	24.98
ZMAX	496590	4.50	7.98	16.70
ZMAX	496600	-1.88	7.42	18.87
ZMAX	496610	4.50	7.18	13.22
ZMAX	496620	4.50	7.17	13.23
ZMAX	497010	11.00	13.88	13.82
ZMAX	497020	3.50	10.05	25.37
ZMAX	497025	8.50	11.09	12.88
ZMAX	497035	6.50	10.20	13.87
ZMAX	497045	4.50	7.67	14.68
ZMAX	497050	3.50	7.66	14.70
ZMAX	497055	3.50	6.68	13.62
ZMAX	497065	1.88	5.09	14.28
ZMAX	497070	8.50	9.97	12.95
ZMAX	497080	2.06	6.03	0.00
ZMAX	497085	6.50	9.95	25.52
ZMAX	497086	6.32	10.24	25.10
ZMAX	497088	5.89	10.05	25.37
ZMAX	497090	4.32	9.96	25.52
ZMAX	497092	3.75	9.15	25.72
ZMAX	497094	2.75	8.71	25.82
ZMAX	497096	2.30	8.20	25.97
ZMAX	497098	1.85	8.06	25.97
ZMAX	497100	-0.16	6.38	25.20
ZMAX	497102	-1.57	5.63	24.82
ZMAX	497104	-2.19	5.47	15.08
ZMAX	497105	-1.00	5.46	15.08
ZMAX	497106	-1.37	4.86	18.87
ZMAX	497107	-2.07	4.83	18.87
ZMAX	497108	-0.37	4.82	18.85
ZMAX	497109	-4.75	4.90	18.92
ZMAX	497111	-3.66	4.83	18.82
ZMAX	497112	-3.66	5.02	18.90
ZMAX	497113	-5.33	5.37	18.83
ZMAX	497110	-0.19	7.02	25.12
ZMAX	497120	1.50	4.84	18.87
ZMAX	497122	4.50	5.42	13.18
ZMAX	497124	4.00	4.84	18.87
ZMAX	497130	-0.21	7.01	25.13
ZMAX	497140	4.00	6.50	0.00
ZMAX	497150	5.40	6.88	12.50
ZMAX	497160	-1.85	7.01	18.25
ZMAX	497161	-2.25	6.55	18.30
ZMAX	497162	-2.86	5.76	18.42
ZMAX	497170	-6.19	3.45	18.85
ZMAX	500010	6.94	10.77	12.72
ZMAX	500020	8.41	9.59	13.77
ZMAX	500025	6.13	9.70	12.83
ZMAX	500030	5.77	9.61	12.88

ALTERNATIVE 2 5-YEAR 24-HOUR

ZMAX	500040	5.07	9.44	12.97
ZMAX	500050	4.00	8.55	12.85
ZMAX	500110	7.43	10.42	12.73
ZMAX	500120	6.16	9.95	26.18
ZMAX	500130	8.00	10.81	13.42
ZMAX	500140	6.39	9.95	26.15
ZMAX	500210	4.00	9.95	26.25
ZMAX	500220	6.91	10.84	12.57
ZMAX	500300	5.00	9.92	12.78
ZMAX	9498000	-6.69	2.96	0.00
ZMAX	9496630	12.00	12.00	0.00
ZMAX	9493020	20.00	20.00	0.00
ZMAX	9493060	22.50	22.50	0.00
ZMAX	9493190	19.00	19.00	0.00
ZMAX	9493140	19.98	19.98	0.00
ZMAX	9493150	19.70	19.70	0.00
ZMAX	9493240	19.00	19.00	0.00
ZMAX	9495030	17.48	17.48	0.00
ZMAX	9495010	23.20	23.20	0.00
ZMAX	9495085	15.10	15.10	0.00
ZMAX	9495140	16.00	16.00	0.00
ZMAX	9495145	16.00	16.00	0.00
ZMAX	9495160	15.50	15.50	0.00
ZMAX	9496320	11.00	11.00	0.00
ZMAX	9496260	14.00	14.00	0.00
ZMAX	9494250	18.00	18.00	0.00
ZMAX	9494190	18.50	18.50	0.00
ZMAX	100043	99.00	99.00	0.00
ZMAX	100044	99.00	99.00	0.00
ZMAX	100045	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100047	99.00	99.00	0.00
ZMAX	100048	99.00	99.00	0.00
ZMAX	100049	99.00	99.00	0.00
ZMAX	100050	99.00	99.00	0.00
ZMAX	100051	99.00	99.00	0.00
ZMAX	100052	99.00	99.00	0.00
ZMAX	100053	99.00	99.00	0.00
ZMAX	100054	99.00	99.00	0.00
ZMAX	100055	99.00	99.00	0.00
ZMAX	100056	99.00	99.00	0.00
ZMAX	100057	99.00	99.00	0.00
ZMAX	100058	99.00	99.00	0.00
ZMAX	100059	99.00	99.00	0.00
ZMAX	100060	99.00	99.00	0.00
ZMAX	100061	99.00	99.00	0.00
ZMAX	100062	99.00	99.00	0.00
ZMAX	100063	99.00	99.00	0.00
ZMAX	100064	99.00	99.00	0.00
ZMAX	100065	99.00	99.00	0.00
ZMAX	100066	99.00	99.00	0.00
ZMAX	100067	99.00	99.00	0.00
ZMAX	100068	99.00	99.00	0.00
ZMAX	100069	99.00	99.00	0.00
ZMAX	100070	99.00	99.00	0.00
ZMAX	100071	99.00	99.00	0.00
ZMAX	100072	99.00	99.00	0.00
ZMAX	100073	99.00	99.00	0.00
ZMAX	100074	99.00	99.00	0.00
ZMAX	100075	99.00	99.00	0.00
ZMAX	100076	99.00	99.00	0.00
ZMAX	100077	99.00	99.00	0.00
ZMAX	100078	99.00	99.00	0.00
ZMAX	100079	99.00	99.00	0.00
ZMAX	100080	99.00	99.00	0.00
ZMAX	100081	99.00	99.00	0.00

ALTERNATIVE 2 5-YEAR 24-HOUR

ZMAX	100082	99.00	99.00	0.00
ZMAX	100083	99.00	99.00	0.00
ZMAX	100084	99.00	99.00	0.00
ZMAX	100085	99.00	99.00	0.00
ZMAX	100086	99.00	99.00	0.00
ZMAX	100087	99.00	99.00	0.00
ZMAX	100088	99.00	99.00	0.00
ZMAX	100089	99.00	99.00	0.00
ZMAX	493341	16.33	18.60	0.00
ZMAX	493481	15.51	16.36	14.40
ZMAX	494141	16.50	17.34	14.18
ZMAX	494151	15.00	17.00	0.00
ZMAX	494111	15.29	16.25	0.12

ALTERNATIVE 2 25-YEAR 24-HOUR

	JUNC ID	INVT	Z_MAX	T_MAX
ZMAX	490000	24.23	28.37	51.75
ZMAX	490004	26.46	28.52	23.28
ZMAX	490002	20.93	28.36	51.73
ZMAX	490008	27.00	28.75	30.02
ZMAX	490010	26.16	28.77	27.03
ZMAX	490020	24.36	28.66	32.30
ZMAX	490030	26.46	28.67	26.00
ZMAX	490040	29.00	30.43	26.53
ZMAX	490050	25.16	28.78	15.58
ZMAX	490070	25.96	29.85	23.03
ZMAX	490071	29.00	30.10	14.08
ZMAX	490072	27.00	28.61	27.35
ZMAX	490073	30.00	32.38	13.73
ZMAX	490080	27.66	30.09	20.65
ZMAX	490090	28.00	31.09	17.40
ZMAX	490100	29.00	29.86	23.15
ZMAX	490110	26.16	30.42	21.98
ZMAX	490120	30.64	33.28	88.20
ZMAX	490130	28.96	33.31	88.20
ZMAX	490140	29.26	31.82	240.00
ZMAX	490141	31.00	32.77	26.40
ZMAX	490150	29.89	34.11	86.20
ZMAX	490160	29.77	35.55	76.17
ZMAX	490170	35.00	38.95	18.53
ZMAX	490180	32.66	38.72	29.67
ZMAX	490181	33.75	38.72	29.78
ZMAX	490200	36.66	38.92	14.87
ZMAX	490210	36.29	38.67	18.67
ZMAX	490211	39.00	40.68	15.37
ZMAX	490220	40.04	42.87	15.73
ZMAX	490221	42.00	45.25	24.38
ZMAX	490230	39.95	41.46	25.25
ZMAX	490240	26.36	31.08	20.87
ZMAX	490250	29.00	33.11	18.93
ZMAX	490251	33.00	35.73	29.93
ZMAX	490260	31.16	34.72	19.57
ZMAX	490261	34.00	36.25	13.68
ZMAX	490263	34.00	35.98	28.08
ZMAX	490264	33.00	35.25	19.08
ZMAX	490266	34.00	36.12	16.08
ZMAX	490270	35.00	38.99	14.97
ZMAX	490280	32.70	35.73	29.93
ZMAX	490281	32.70	35.73	29.90
ZMAX	490290	31.00	34.93	16.10
ZMAX	490300	31.86	34.84	17.57
ZMAX	490310	33.00	37.13	17.63
ZMAX	490320	34.00	37.98	16.77
ZMAX	490321	36.00	38.60	24.48
ZMAX	490330	37.00	38.74	15.72
ZMAX	490340	35.00	37.94	15.93
ZMAX	490350	36.00	38.77	15.67
ZMAX	490370	33.96	36.43	57.00
ZMAX	490375	35.00	38.61	54.27
ZMAX	490390	34.56	38.71	19.92
ZMAX	490391	36.80	38.00	21.57
ZMAX	490392	36.40	37.07	15.38
ZMAX	490400	37.00	39.01	16.07
ZMAX	490401	37.00	39.71	25.98
ZMAX	490410	35.46	38.61	54.18
ZMAX	490411	36.00	38.61	54.30
ZMAX	490420	35.00	40.76	48.58
ZMAX	490421	39.00	40.16	28.50
ZMAX	490422	39.00	41.18	16.93
ZMAX	490425	38.00	40.76	49.17
ZMAX	490430	35.47	41.32	28.23
ZMAX	490440	40.00	43.49	26.10

ALTERNATIVE 2 25-YEAR 24-HOUR

ZMAX	490450	39.00	40.86	25.57
ZMAX	490451	39.00	40.57	63.08
ZMAX	490453	39.00	40.57	63.08
ZMAX	490455	39.00	40.77	18.40
ZMAX	490460	43.00	46.56	27.58
ZMAX	490470	40.00	42.50	36.22
ZMAX	490480	39.67	42.50	36.52
ZMAX	490490	40.38	42.78	21.83
ZMAX	490500	41.00	45.04	35.87
ZMAX	490510	49.00	51.19	17.32
ZMAX	490520	43.47	49.71	24.33
ZMAX	490530	51.00	54.87	82.32
ZMAX	490535	56.47	58.48	15.63
ZMAX	490540	56.00	58.76	15.58
ZMAX	490550	48.00	49.84	16.68
ZMAX	490555	48.07	52.12	13.70
ZMAX	490560	49.00	50.03	16.08
ZMAX	490580	35.47	41.48	28.00
ZMAX	490590	48.37	49.84	25.68
ZMAX	490600	42.54	44.75	15.92
ZMAX	490610	39.77	42.47	26.28
ZMAX	490612	42.00	44.27	15.28
ZMAX	490620	41.70	43.14	15.70
ZMAX	490621	44.00	45.43	18.08
ZMAX	490630	42.17	45.13	22.68
ZMAX	490637	41.53	43.06	14.32
ZMAX	490638	44.12	44.62	24.58
ZMAX	490639	48.72	49.71	15.05
ZMAX	490640	37.57	41.57	26.95
ZMAX	490641	44.00	48.12	24.27
ZMAX	490642	45.16	48.40	16.60
ZMAX	490643	39.87	45.63	16.23
ZMAX	490644	47.67	49.63	15.20
ZMAX	490645	48.67	51.72	14.87
ZMAX	490646	41.53	47.77	14.02
ZMAX	490650	43.27	45.90	17.90
ZMAX	490651	48.16	50.96	16.93
ZMAX	490652	43.47	46.34	14.20
ZMAX	490654	46.00	48.44	17.00
ZMAX	490655	46.55	48.90	14.03
ZMAX	490659	45.57	49.12	15.45
ZMAX	490660	39.87	47.60	15.55
ZMAX	490661	45.57	50.45	15.18
ZMAX	490670	45.37	49.21	15.73
ZMAX	490675	41.87	49.03	15.62
ZMAX	490680	47.11	50.23	16.72
ZMAX	490690	45.49	49.30	15.95
ZMAX	490700	53.74	59.45	29.95
ZMAX	490710	47.96	52.70	27.10
ZMAX	490711	52.00	54.53	16.28
ZMAX	490720	50.00	52.67	27.00
ZMAX	490730	50.23	53.77	26.23
ZMAX	490740	49.64	54.17	16.68
ZMAX	490742	58.00	59.70	28.00
ZMAX	490743	48.76	54.22	17.32
ZMAX	490744	49.87	54.22	17.32
ZMAX	490745	57.00	59.70	28.00
ZMAX	490746	57.00	60.23	26.48
ZMAX	490750	51.30	54.18	17.95
ZMAX	490751	55.00	56.59	25.63
ZMAX	490760	50.95	54.43	24.75
ZMAX	490770	51.91	55.55	26.07
ZMAX	490771	55.00	56.66	25.73
ZMAX	490772	56.00	57.91	26.25
ZMAX	490773	56.00	59.07	25.82
ZMAX	490776	56.00	57.62	25.05
ZMAX	490779	55.00	57.37	16.63

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ZMAX	490780	54.21	57.67	22.25
ZMAX	490790	53.17	55.58	28.32
ZMAX	490791	56.00	58.61	27.17
ZMAX	490792	56.00	58.35	25.97
ZMAX	490794	56.00	57.67	29.38
ZMAX	490795	56.00	57.44	27.33
ZMAX	490800	53.17	55.96	14.97
ZMAX	490801	55.00	57.44	16.42
ZMAX	490802	56.00	58.00	25.58
ZMAX	490803	57.00	58.52	27.98
ZMAX	490804	56.00	58.52	27.70
ZMAX	490900	53.67	55.58	28.42
ZMAX	491010	22.06	25.52	14.12
ZMAX	491019	26.44	27.85	18.53
ZMAX	491020	26.14	29.05	16.60
ZMAX	491021	26.00	29.05	17.78
ZMAX	491022	27.07	29.04	17.30
ZMAX	491040	23.16	25.71	14.08
ZMAX	491041	26.86	29.46	13.87
ZMAX	491042	27.66	28.87	16.80
ZMAX	491043	27.17	28.78	16.83
ZMAX	491044	27.66	29.37	13.92
ZMAX	491060	25.96	29.82	63.60
ZMAX	491080	25.66	30.05	63.60
ZMAX	491100	28.96	31.12	62.93
ZMAX	491102	29.00	31.46	13.23
ZMAX	491120	27.86	31.87	84.13
ZMAX	491121	29.25	32.32	29.87
ZMAX	491122	32.00	33.38	13.42
ZMAX	491123	32.00	33.78	17.00
ZMAX	491140	29.62	32.47	29.55
ZMAX	491160	30.66	33.39	16.55
ZMAX	491180	32.00	35.42	26.15
ZMAX	491200	34.46	37.36	15.20
ZMAX	491220	36.97	38.44	19.33
ZMAX	491221	33.05	36.58	15.85
ZMAX	491222	36.80	38.95	13.12
ZMAX	491223	34.39	36.59	15.83
ZMAX	491240	31.00	33.19	27.75
ZMAX	491260	29.00	31.91	41.52
ZMAX	491280	29.00	32.00	38.45
ZMAX	491285	30.77	39.04	14.15
ZMAX	491300	29.00	31.92	41.52
ZMAX	491302	33.00	36.56	16.10
ZMAX	491320	32.90	36.55	15.93
ZMAX	491340	29.17	32.95	42.82
ZMAX	491344	36.00	38.48	27.60
ZMAX	491342	31.36	34.15	14.47
ZMAX	491360	33.97	36.88	16.73
ZMAX	491380	31.36	35.65	16.87
ZMAX	491382	33.00	33.59	14.38
ZMAX	491384	30.00	32.34	19.10
ZMAX	491387	34.17	39.59	25.33
ZMAX	491388	34.17	41.26	23.77
ZMAX	491390	36.63	39.63	15.52
ZMAX	491391	35.17	39.68	25.27
ZMAX	491393	42.00	45.45	23.05
ZMAX	491394	36.67	40.94	15.98
ZMAX	491395	35.27	39.68	25.33
ZMAX	491396	38.00	41.23	25.05
ZMAX	491397	32.07	39.50	25.43
ZMAX	491398	42.00	44.13	19.02
ZMAX	491399	38.00	41.28	23.77
ZMAX	491400	33.27	38.16	25.80
ZMAX	491401	36.77	42.43	14.37
ZMAX	491402	32.17	39.56	25.02
ZMAX	491404	38.96	41.29	23.82

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ZMAX	491406	36.77	40.95	15.97
ZMAX	491407	32.17	39.52	25.22
ZMAX	491392	43.00	47.53	19.02
ZMAX	491403	45.00	48.19	18.73
ZMAX	491440	38.17	39.98	20.50
ZMAX	491441	38.54	39.98	20.45
ZMAX	491460	30.71	36.68	14.35
ZMAX	491465	31.27	36.50	25.52
ZMAX	491480	33.87	36.84	13.53
ZMAX	491500	30.00	36.55	27.15
ZMAX	491501	31.17	36.54	27.22
ZMAX	491502	36.00	38.05	24.28
ZMAX	491520	38.15	41.52	13.77
ZMAX	491540	41.00	44.22	16.58
ZMAX	491541	42.00	46.58	27.38
ZMAX	491452	42.00	44.02	19.80
ZMAX	491453	37.18	40.18	13.47
ZMAX	491560	41.00	41.97	29.05
ZMAX	491561	38.00	42.12	29.67
ZMAX	491562	44.00	45.31	30.95
ZMAX	491563	39.00	42.12	29.67
ZMAX	491580	36.55	38.25	240.00
ZMAX	491600	39.73	42.59	159.15
ZMAX	491620	45.57	47.10	27.02
ZMAX	491621	48.00	50.63	27.65
ZMAX	490232	44.00	46.68	15.08
ZMAX	490431	41.00	44.60	26.55
ZMAX	490449	41.00	43.73	16.33
ZMAX	490457	39.00	40.79	18.67
ZMAX	490491	47.00	50.31	219.30
ZMAX	490492	47.00	51.03	17.72
ZMAX	490501	46.00	49.01	13.98
ZMAX	490511	48.00	50.60	28.05
ZMAX	490561	57.00	58.80	27.85
ZMAX	490581	44.00	46.11	14.50
ZMAX	490582	50.00	52.16	14.25
ZMAX	490584	50.00	52.32	25.10
ZMAX	490587	53.00	57.25	14.03
ZMAX	490701	54.00	58.71	15.35
ZMAX	490702	57.00	60.53	15.67
ZMAX	490703	53.74	55.40	14.15
ZMAX	490704	56.00	60.69	13.47
ZMAX	490713	52.00	54.37	19.92
ZMAX	490741	58.00	59.18	28.28
ZMAX	490762	56.00	59.03	25.53
ZMAX	490781	58.00	62.09	17.28
ZMAX	491274	31.22	39.06	14.17
ZMAX	491284	33.92	36.96	14.38
ZMAX	491389	39.00	40.60	20.42
ZMAX	491700	23.00	27.53	20.18
ZMAX	491701	9.70	25.35	29.83
ZMAX	491702	55.00	57.51	32.57
ZMAX	491703	25.00	27.50	15.93
ZMAX	491704	56.00	58.78	15.47
ZMAX	491705	55.80	57.51	32.57
ZMAX	491706	48.90	51.94	27.80
ZMAX	491707	45.00	46.96	30.25
ZMAX	491708	36.00	38.59	24.65
ZMAX	491709	37.00	39.24	15.80
ZMAX	491710	27.00	28.89	15.88
ZMAX	491711	24.00	26.41	25.53
ZMAX	491712	30.33	34.47	29.73
ZMAX	491713	30.00	34.07	61.45
ZMAX	491714	31.00	32.38	17.52
ZMAX	491715	40.17	42.50	36.25
ZMAX	491716	30.00	34.88	25.02
ZMAX	491717	52.00	55.24	16.38

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ZMAX	491718	34.00	36.55	14.83
ZMAX	491719	42.00	46.66	28.32
ZMAX	491720	38.00	40.61	15.87
ZMAX	491721	38.00	40.53	25.87
ZMAX	491722	39.00	39.92	17.15
ZMAX	491723	29.00	37.81	56.38
ZMAX	491724	29.00	34.88	24.98
ZMAX	491725	33.00	34.40	16.27
ZMAX	491728	30.00	35.21	15.82
ZMAX	491729	27.00	31.35	24.37
ZMAX	491730	26.00	29.87	18.22
ZMAX	491737	38.00	38.64	15.87
ZMAX	491740	37.00	38.62	15.67
ZMAX	491745	37.00	39.14	17.67
ZMAX	491746	37.00	39.08	26.35
ZMAX	491750	44.00	46.32	27.67
ZMAX	491753	49.00	51.45	21.95
ZMAX	490574	41.77	46.00	16.02
ZMAX	491405	42.00	44.60	17.08
ZMAX	490714	52.00	54.56	16.50
ZMAX	490753	51.00	54.46	29.98
ZMAX	491224	39.00	42.78	28.87
ZMAX	491225	41.50	43.96	14.92
ZMAX	491759	39.00	40.68	22.40
ZMAX	491760	39.00	40.61	22.92
ZMAX	491764	38.00	40.38	24.43
ZMAX	491768	38.00	40.29	24.43
ZMAX	499999	35.85	40.24	24.50
ZMAX	499998	35.80	40.22	24.47
ZMAX	499997	35.00	36.00	24.42
ZMAX	491002	30.84	34.07	61.45
ZMAX	491001	28.00	34.07	61.33
ZMAX	100000	99.00	99.00	0.00
ZMAX	100001	99.00	99.00	0.00
ZMAX	100002	99.00	99.00	0.00
ZMAX	100003	99.00	99.00	0.00
ZMAX	100004	99.00	99.00	0.00
ZMAX	100005	99.00	99.00	0.00
ZMAX	100006	99.00	99.00	0.00
ZMAX	100007	99.00	99.00	0.00
ZMAX	100008	99.00	99.00	0.00
ZMAX	100009	99.00	99.00	0.00
ZMAX	100010	99.00	99.00	0.00
ZMAX	100011	99.00	99.00	0.00
ZMAX	100012	99.00	99.00	0.00
ZMAX	100013	99.00	99.00	0.00
ZMAX	100014	99.00	99.00	0.00
ZMAX	100015	99.00	99.00	0.00
ZMAX	100016	99.00	99.00	0.00
ZMAX	100017	99.00	99.00	0.00
ZMAX	100018	99.00	99.00	0.00
ZMAX	100019	99.00	99.00	0.00
ZMAX	100020	99.00	99.00	0.00
ZMAX	100021	99.00	99.00	0.00
ZMAX	100022	99.00	99.00	0.00
ZMAX	100023	99.00	99.00	0.00
ZMAX	100024	99.00	99.00	0.00
ZMAX	100025	99.00	99.00	0.00
ZMAX	100026	99.00	99.00	0.00
ZMAX	100027	99.00	99.00	0.00
ZMAX	100028	99.00	99.00	0.00
ZMAX	100029	99.00	99.00	0.00
ZMAX	100030	99.00	99.00	0.00
ZMAX	100031	99.00	99.00	0.00
ZMAX	100032	99.00	99.00	0.00
ZMAX	100033	99.00	99.00	0.00
ZMAX	100034	99.00	99.00	0.00

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ZMAX	100035	99.00	99.00	0.00
ZMAX	100036	99.00	99.00	0.00
ZMAX	100037	99.00	99.00	0.00
ZMAX	100038	99.00	99.00	0.00
ZMAX	100039	99.00	99.00	0.00
ZMAX	100040	99.00	99.00	0.00
ZMAX	493010	17.00	23.49	25.48
ZMAX	493020	20.00	23.04	18.10
ZMAX	493030	18.00	24.47	13.05
ZMAX	493040	17.00	22.33	17.12
ZMAX	493060	21.00	21.50	13.27
ZMAX	493070	19.00	26.94	13.57
ZMAX	493090	18.00	23.45	25.08
ZMAX	493100	20.00	21.15	12.67
ZMAX	493110	18.00	20.02	12.90
ZMAX	493120	18.00	20.00	0.00
ZMAX	493130	17.00	20.16	12.70
ZMAX	493140	16.00	18.79	13.38
ZMAX	493150	16.00	19.40	13.03
ZMAX	493180	18.00	24.21	14.08
ZMAX	493185	19.00	24.19	14.08
ZMAX	493190	17.00	19.35	12.98
ZMAX	493195	17.00	20.16	13.05
ZMAX	493200	18.00	20.03	52.68
ZMAX	493210	18.00	19.27	12.98
ZMAX	493215	19.00	21.01	20.03
ZMAX	493220	16.00	19.14	13.10
ZMAX	493230	15.50	18.79	13.38
ZMAX	493240	16.00	19.33	27.43
ZMAX	493250	17.00	24.21	14.08
ZMAX	493260	21.00	24.19	13.65
ZMAX	493270	19.00	24.18	13.65
ZMAX	493280	19.00	23.09	13.00
ZMAX	493290	19.00	22.29	13.02
ZMAX	493310	17.00	23.77	52.17
ZMAX	493320	17.00	20.03	52.68
ZMAX	493330	17.00	20.00	13.30
ZMAX	493340	16.33	19.98	52.72
ZMAX	493350	15.50	17.76	13.03
ZMAX	493360	13.00	18.00	0.00
ZMAX	493370	14.61	18.28	13.85
ZMAX	493380	14.50	17.53	14.83
ZMAX	493390	14.50	18.09	13.43
ZMAX	493400	13.50	17.54	14.80
ZMAX	493410	12.50	17.53	14.82
ZMAX	493420	13.50	16.28	0.03
ZMAX	493430	12.44	15.94	0.07
ZMAX	493440	15.50	19.33	27.43
ZMAX	493450	18.00	19.16	14.50
ZMAX	493470	16.00	19.16	14.52
ZMAX	493480	15.50	19.19	14.50
ZMAX	493500	12.27	16.62	14.22
ZMAX	493505	12.27	15.54	16.12
ZMAX	493520	11.76	14.63	15.48
ZMAX	493525	11.00	14.58	15.35
ZMAX	493530	14.50	17.29	13.67
ZMAX	493535	15.00	17.29	13.67
ZMAX	493540	13.50	16.00	0.00
ZMAX	493545	9.65	14.55	15.32
ZMAX	493550	14.50	15.24	12.67
ZMAX	493555	13.50	14.88	13.63
ZMAX	494010	24.80	26.00	0.00
ZMAX	494020	22.90	25.59	12.67
ZMAX	494025	20.00	21.25	12.73
ZMAX	494030	22.00	22.74	13.00
ZMAX	494040	19.00	20.56	13.03
ZMAX	494045	18.70	20.56	13.03

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ZMAX	494050	20.00	25.00	0.00
ZMAX	494060	25.00	26.00	0.00
ZMAX	494070	18.00	19.88	13.68
ZMAX	494072	19.00	22.07	13.53
ZMAX	494074	20.00	21.08	12.73
ZMAX	494076	19.00	21.08	12.72
ZMAX	494078	21.00	22.18	12.73
ZMAX	494080	18.00	20.17	12.83
ZMAX	494100	17.00	19.08	15.12
ZMAX	494110	15.29	18.88	14.67
ZMAX	494120	18.00	19.32	13.43
ZMAX	494130	17.00	18.96	14.63
ZMAX	494140	14.50	18.96	14.63
ZMAX	494150	15.00	18.93	14.65
ZMAX	494170	18.00	19.89	13.65
ZMAX	494180	17.00	19.64	14.57
ZMAX	494185	17.00	19.77	13.73
ZMAX	494190	17.00	18.71	13.80
ZMAX	494200	15.00	16.97	0.03
ZMAX	494205	17.00	19.05	12.60
ZMAX	494210	14.87	18.80	0.00
ZMAX	494220	15.75	18.22	0.02
ZMAX	494230	16.00	18.12	14.12
ZMAX	494240	15.71	18.39	13.38
ZMAX	494250	16.70	18.00	0.00
ZMAX	495010	20.00	23.23	12.52
ZMAX	495020	15.50	19.33	27.43
ZMAX	495030	15.50	19.33	27.43
ZMAX	495035	19.00	21.09	24.97
ZMAX	495038	17.00	18.17	12.78
ZMAX	495040	16.00	18.70	12.88
ZMAX	495045	15.00	15.88	12.68
ZMAX	495050	15.50	18.89	24.92
ZMAX	495055	15.50	16.83	12.57
ZMAX	495060	14.80	15.87	12.70
ZMAX	495065	14.50	16.26	12.57
ZMAX	495070	11.50	13.58	17.43
ZMAX	495075	11.50	13.23	21.03
ZMAX	495080	13.18	14.00	0.00
ZMAX	495085	13.00	15.04	17.12
ZMAX	495090	11.42	13.34	14.25
ZMAX	495100	15.00	17.71	16.02
ZMAX	495110	14.50	17.09	12.50
ZMAX	495120	13.00	14.23	12.92
ZMAX	495125	14.42	16.35	14.60
ZMAX	495140	14.50	16.81	26.47
ZMAX	495145	14.50	16.81	26.47
ZMAX	495150	13.00	14.24	12.92
ZMAX	495152	12.50	16.09	25.52
ZMAX	495154	12.50	16.02	19.38
ZMAX	495155	12.50	16.02	19.38
ZMAX	495156	12.50	13.50	0.00
ZMAX	495160	12.50	16.03	24.87
ZMAX	495162	13.50	15.57	25.52
ZMAX	495165	13.50	16.01	17.57
ZMAX	495170	12.50	15.75	13.55
ZMAX	495180	10.45	12.63	22.08
ZMAX	495210	12.50	14.68	25.08
ZMAX	495215	12.50	14.23	12.93
ZMAX	495230	8.82	12.33	13.10
ZMAX	495235	10.50	13.88	24.82
ZMAX	495240	8.50	10.99	23.50
ZMAX	495260	13.00	16.05	24.57
ZMAX	495270	12.50	14.22	12.93
ZMAX	495275	11.50	13.22	12.92
ZMAX	495280	10.90	11.27	12.97
ZMAX	495300	13.94	15.71	13.82

ALTERNATIVE 2 25-YEAR 24-HOUR

ZMAX	495302	13.90	15.66	13.55
ZMAX	495304	13.31	15.59	13.22
ZMAX	495306	12.73	14.38	13.88
ZMAX	495308	12.18	14.26	14.25
ZMAX	495310	11.49	13.32	13.38
ZMAX	495312	10.92	13.29	13.28
ZMAX	495314	10.43	13.25	20.92
ZMAX	495316	11.80	14.15	12.53
ZMAX	495320	9.75	13.25	20.93
ZMAX	495322	9.64	14.42	15.48
ZMAX	495324	9.44	14.18	15.63
ZMAX	495326	9.30	13.69	16.87
ZMAX	495328	9.43	13.58	17.42
ZMAX	495330	9.20	13.58	17.43
ZMAX	495332	9.02	13.58	17.37
ZMAX	495334	8.90	13.37	18.30
ZMAX	495336	8.72	13.23	20.95
ZMAX	495338	8.53	13.23	21.03
ZMAX	495340	8.40	13.22	21.05
ZMAX	495342	8.23	13.21	21.07
ZMAX	495344	8.04	13.07	21.45
ZMAX	495346	7.85	12.93	21.72
ZMAX	495348	7.66	12.63	22.08
ZMAX	495350	7.47	11.33	22.98
ZMAX	495352	7.34	11.01	23.48
ZMAX	495354	7.26	11.00	23.48
ZMAX	495356	7.19	10.95	23.52
ZMAX	496010	14.50	16.35	14.62
ZMAX	496020	14.50	18.80	0.00
ZMAX	496030	14.50	16.32	0.02
ZMAX	496060	16.60	16.77	12.83
ZMAX	496065	14.00	16.29	14.62
ZMAX	496070	14.00	16.29	14.62
ZMAX	496080	14.20	18.00	0.00
ZMAX	496090	14.00	18.00	0.00
ZMAX	496100	12.50	15.90	0.07
ZMAX	496110	11.00	15.79	14.90
ZMAX	496120	13.00	15.37	22.48
ZMAX	496125	12.00	15.36	22.40
ZMAX	496130	13.00	15.65	14.97
ZMAX	496150	14.00	15.74	14.95
ZMAX	496160	11.00	15.36	22.40
ZMAX	496170	12.00	15.77	14.93
ZMAX	496175	12.00	14.96	14.97
ZMAX	496180	11.00	13.27	14.92
ZMAX	496190	11.00	13.27	14.93
ZMAX	496200	10.50	12.02	15.68
ZMAX	496232	16.00	18.00	0.00
ZMAX	496234	14.00	16.36	0.15
ZMAX	496235	15.00	15.40	13.42
ZMAX	496240	14.28	15.82	0.03
ZMAX	496245	13.50	15.22	13.85
ZMAX	496260	13.50	15.17	13.80
ZMAX	496270	12.50	13.85	13.55
ZMAX	496280	9.50	12.33	13.95
ZMAX	496310	10.50	12.01	15.72
ZMAX	496320	10.50	11.98	15.73
ZMAX	496340	4.43	11.97	15.72
ZMAX	496350	8.50	10.59	25.02
ZMAX	496360	7.50	9.08	13.68
ZMAX	496370	6.50	8.68	18.13
ZMAX	496380	5.50	8.67	18.08
ZMAX	496390	4.41	8.75	17.95
ZMAX	496395	4.50	8.49	18.47
ZMAX	496400	6.50	8.67	18.07
ZMAX	496410	-0.65	8.49	18.47
ZMAX	496420	3.50	8.30	19.58

ALTERNATIVE 2 25-YEAR 24-HOUR

ZMAX	496430	5.50	9.18	12.98
ZMAX	496440	5.50	8.32	19.87
ZMAX	496450	3.50	8.32	19.87
ZMAX	496460	5.50	10.10	14.18
ZMAX	496470	3.00	8.32	19.85
ZMAX	496480	6.50	10.06	15.08
ZMAX	496485	7.50	11.00	16.52
ZMAX	496490	3.50	9.02	20.33
ZMAX	496500	6.50	11.00	0.00
ZMAX	496510	4.50	8.50	240.00
ZMAX	496515	4.50	8.32	19.87
ZMAX	496520	5.50	8.31	19.85
ZMAX	496530	5.50	8.31	19.87
ZMAX	496540	6.50	8.32	19.87
ZMAX	496545	4.00	8.31	19.87
ZMAX	496550	4.00	8.31	19.85
ZMAX	496560	3.00	8.32	19.85
ZMAX	496570	5.50	8.30	19.83
ZMAX	496580	7.50	11.01	13.97
ZMAX	496590	4.50	8.49	18.47
ZMAX	496600	-1.88	8.32	19.77
ZMAX	496610	4.50	8.26	19.73
ZMAX	496620	4.50	8.25	19.68
ZMAX	497010	11.00	13.93	13.30
ZMAX	497020	3.50	10.72	23.80
ZMAX	497025	8.50	11.15	12.73
ZMAX	497035	6.50	10.48	13.15
ZMAX	497045	4.50	8.01	13.30
ZMAX	497050	3.50	8.00	13.30
ZMAX	497055	3.50	7.16	22.55
ZMAX	497065	1.88	7.16	22.55
ZMAX	497070	8.50	10.07	12.88
ZMAX	497080	2.06	7.42	20.32
ZMAX	497085	6.50	10.54	23.97
ZMAX	497086	6.32	10.95	23.52
ZMAX	497088	5.89	10.72	23.80
ZMAX	497090	4.32	10.62	23.93
ZMAX	497092	3.75	10.38	24.02
ZMAX	497094	2.75	9.96	24.05
ZMAX	497096	2.30	9.08	24.07
ZMAX	497098	1.85	8.80	24.05
ZMAX	497100	-0.16	7.89	20.88
ZMAX	497102	-1.57	7.76	20.70
ZMAX	497104	-2.19	7.68	20.62
ZMAX	497105	-1.00	7.66	20.60
ZMAX	497106	-1.37	7.40	20.28
ZMAX	497107	-2.07	7.39	20.27
ZMAX	497108	-0.37	7.37	20.27
ZMAX	497109	-4.75	7.38	20.27
ZMAX	497111	-3.66	7.38	20.25
ZMAX	497112	-3.66	7.30	20.27
ZMAX	497113	-5.33	7.18	20.25
ZMAX	497110	-0.19	9.26	16.98
ZMAX	497120	1.50	7.39	20.28
ZMAX	497122	4.50	7.39	20.28
ZMAX	497124	4.00	7.39	20.28
ZMAX	497130	-0.21	8.21	18.58
ZMAX	497140	4.00	7.41	20.32
ZMAX	497150	5.40	7.38	20.27
ZMAX	497160	-1.85	8.23	19.63
ZMAX	497161	-2.25	8.01	19.82
ZMAX	497162	-2.86	7.58	20.15
ZMAX	497170	-6.19	4.29	20.32
ZMAX	500010	6.94	11.25	12.75
ZMAX	500020	8.41	10.31	14.28
ZMAX	500025	6.13	11.05	12.97
ZMAX	500030	5.77	11.04	12.97

ALTERNATIVE 2 25-YEAR 24-HOUR

ZMAX	500040	5.07	10.55	13.05
ZMAX	500050	4.00	9.10	24.05
ZMAX	500110	7.43	11.26	12.82
ZMAX	500120	6.16	10.62	24.02
ZMAX	500130	8.00	11.90	13.58
ZMAX	500140	6.39	10.64	24.62
ZMAX	500210	4.00	10.65	24.62
ZMAX	500220	6.91	11.27	12.73
ZMAX	500300	5.00	10.08	12.68
ZMAX	9498000	-6.69	2.96	0.00
ZMAX	9496630	12.00	12.00	0.00
ZMAX	9493020	20.00	20.00	0.00
ZMAX	9493060	22.50	22.50	0.00
ZMAX	9493190	19.00	19.00	0.00
ZMAX	9493140	19.98	19.98	0.00
ZMAX	9493150	19.70	19.70	0.00
ZMAX	9493240	19.00	19.00	0.00
ZMAX	9495030	17.48	17.48	0.00
ZMAX	9495010	23.20	23.20	0.00
ZMAX	9495085	15.10	15.10	0.00
ZMAX	9495140	16.00	16.00	0.00
ZMAX	9495145	16.00	16.00	0.00
ZMAX	9495160	15.50	15.50	0.00
ZMAX	9496320	11.00	11.00	0.00
ZMAX	9496260	14.00	14.00	0.00
ZMAX	9494250	18.00	18.00	0.00
ZMAX	9494190	18.50	18.50	0.00
ZMAX	100043	99.00	99.00	0.00
ZMAX	100044	99.00	99.00	0.00
ZMAX	100045	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100047	99.00	99.00	0.00
ZMAX	100048	99.00	99.00	0.00
ZMAX	100049	99.00	99.00	0.00
ZMAX	100050	99.00	99.00	0.00
ZMAX	100051	99.00	99.00	0.00
ZMAX	100052	99.00	99.00	0.00
ZMAX	100053	99.00	99.00	0.00
ZMAX	100054	99.00	99.00	0.00
ZMAX	100055	99.00	99.00	0.00
ZMAX	100056	99.00	99.00	0.00
ZMAX	100057	99.00	99.00	0.00
ZMAX	100058	99.00	99.00	0.00
ZMAX	100059	99.00	99.00	0.00
ZMAX	100060	99.00	99.00	0.00
ZMAX	100061	99.00	99.00	0.00
ZMAX	100062	99.00	99.00	0.00
ZMAX	100063	99.00	99.00	0.00
ZMAX	100064	99.00	99.00	0.00
ZMAX	100065	99.00	99.00	0.00
ZMAX	100066	99.00	99.00	0.00
ZMAX	100067	99.00	99.00	0.00
ZMAX	100068	99.00	99.00	0.00
ZMAX	100069	99.00	99.00	0.00
ZMAX	100070	99.00	99.00	0.00
ZMAX	100071	99.00	99.00	0.00
ZMAX	100072	99.00	99.00	0.00
ZMAX	100073	99.00	99.00	0.00
ZMAX	100074	99.00	99.00	0.00
ZMAX	100075	99.00	99.00	0.00
ZMAX	100076	99.00	99.00	0.00
ZMAX	100077	99.00	99.00	0.00
ZMAX	100078	99.00	99.00	0.00
ZMAX	100079	99.00	99.00	0.00
ZMAX	100080	99.00	99.00	0.00
ZMAX	100081	99.00	99.00	0.00

ALTERNATIVE 2 25-YEAR 24-HOUR

ZMAX	100082	99.00	99.00	0.00
ZMAX	100083	99.00	99.00	0.00
ZMAX	100084	99.00	99.00	0.00
ZMAX	100085	99.00	99.00	0.00
ZMAX	100086	99.00	99.00	0.00
ZMAX	100087	99.00	99.00	0.00
ZMAX	100088	99.00	99.00	0.00
ZMAX	100089	99.00	99.00	0.00
ZMAX	493341	16.33	18.60	0.00
ZMAX	493481	15.51	16.62	14.22
ZMAX	494141	16.50	17.72	15.80
ZMAX	494151	15.00	17.00	0.00
ZMAX	494111	15.29	16.60	14.67

Alternative 3 Weirs Raise Road

ALTERNATIVE 3 5-YEAR 24-HOUR

	JUNC ID	INVT	Z_MAX	T_MAX
ZMAX	490000	24.23	26.46	0.00
ZMAX	490004	26.46	27.84	25.85
ZMAX	490002	20.93	26.14	29.05
ZMAX	490008	27.00	28.09	29.87
ZMAX	490010	26.16	28.19	39.67
ZMAX	490020	24.36	28.20	26.73
ZMAX	490030	26.46	28.14	25.25
ZMAX	490040	29.00	29.90	26.57
ZMAX	490050	25.16	28.39	15.43
ZMAX	490070	25.96	29.13	26.62
ZMAX	490071	29.00	29.91	14.60
ZMAX	490072	27.00	28.02	27.30
ZMAX	490073	30.00	32.31	14.45
ZMAX	490080	27.66	29.13	27.27
ZMAX	490090	28.00	30.71	27.40
ZMAX	490100	29.00	29.69	14.10
ZMAX	490110	26.16	29.70	25.18
ZMAX	490120	30.64	33.01	69.35
ZMAX	490130	28.96	33.02	69.30
ZMAX	490140	29.26	31.53	240.00
ZMAX	490141	31.00	32.13	26.37
ZMAX	490150	29.89	33.27	67.15
ZMAX	490160	29.77	34.52	59.60
ZMAX	490170	35.00	38.56	26.23
ZMAX	490180	32.66	37.49	26.72
ZMAX	490181	33.75	37.49	26.82
ZMAX	490200	36.66	38.56	26.23
ZMAX	490210	36.29	38.35	0.00
ZMAX	490211	39.00	40.60	17.20
ZMAX	490220	40.04	42.02	15.35
ZMAX	490221	42.00	44.50	30.53
ZMAX	490230	39.95	40.97	25.65
ZMAX	490240	26.36	30.28	24.42
ZMAX	490250	29.00	32.36	21.48
ZMAX	490251	33.00	34.78	29.83
ZMAX	490260	31.16	33.28	16.17
ZMAX	490261	34.00	36.08	13.83
ZMAX	490263	34.00	35.25	28.05
ZMAX	490264	33.00	34.83	24.37
ZMAX	490266	34.00	35.80	16.42
ZMAX	490270	35.00	37.74	14.40
ZMAX	490280	32.70	34.78	29.83
ZMAX	490281	32.70	34.78	29.75
ZMAX	490290	31.00	34.39	16.30
ZMAX	490300	31.86	33.17	13.50
ZMAX	490310	33.00	36.26	18.32
ZMAX	490320	34.00	37.76	20.60
ZMAX	490321	36.00	38.24	37.90
ZMAX	490330	37.00	38.66	27.77
ZMAX	490340	35.00	37.83	14.20
ZMAX	490350	36.00	38.67	25.85
ZMAX	490370	33.96	35.92	25.73
ZMAX	490375	35.00	38.08	57.18
ZMAX	490390	34.56	37.97	24.93
ZMAX	490391	36.80	37.26	26.05
ZMAX	490392	36.40	36.82	15.00
ZMAX	490400	37.00	38.89	25.85
ZMAX	490401	37.00	39.37	25.98
ZMAX	490410	35.46	38.08	57.08
ZMAX	490411	36.00	38.08	57.08
ZMAX	490420	35.00	40.20	50.95
ZMAX	490421	39.00	39.74	28.53
ZMAX	490422	39.00	41.05	25.17
ZMAX	490425	38.00	40.20	51.63
ZMAX	490430	35.47	40.69	26.00
ZMAX	490440	40.00	42.84	26.75

ALTERNATIVE 3 5-YEAR 24-HOUR

ZMAX	490450	39.00	40.58	57.92
ZMAX	490451	39.00	40.14	29.65
ZMAX	490453	39.00	40.14	31.75
ZMAX	490455	39.00	40.60	21.83
ZMAX	490460	43.00	45.73	27.53
ZMAX	490470	40.00	41.74	25.50
ZMAX	490480	39.67	42.00	0.00
ZMAX	490490	40.38	42.30	19.83
ZMAX	490500	41.00	44.61	59.72
ZMAX	490510	49.00	50.73	17.83
ZMAX	490520	43.47	48.11	27.60
ZMAX	490530	51.00	54.16	83.12
ZMAX	490535	56.47	57.94	16.12
ZMAX	490540	56.00	58.17	16.05
ZMAX	490550	48.00	49.28	17.52
ZMAX	490555	48.07	51.02	13.92
ZMAX	490560	49.00	49.74	16.27
ZMAX	490580	35.47	40.81	25.98
ZMAX	490590	48.37	49.31	26.27
ZMAX	490600	42.54	44.45	25.78
ZMAX	490610	39.77	41.38	27.08
ZMAX	490612	42.00	44.20	27.75
ZMAX	490620	41.70	42.88	16.80
ZMAX	490621	44.00	45.18	27.30
ZMAX	490630	42.17	44.53	20.53
ZMAX	490637	41.53	42.43	14.78
ZMAX	490638	44.12	44.50	24.82
ZMAX	490639	48.72	49.21	14.53
ZMAX	490640	37.57	40.86	25.33
ZMAX	490641	44.00	46.73	24.48
ZMAX	490642	45.16	47.24	16.32
ZMAX	490643	39.87	44.93	16.70
ZMAX	490644	47.67	49.21	14.60
ZMAX	490645	48.67	51.27	24.60
ZMAX	490646	41.53	47.31	14.48
ZMAX	490650	43.27	45.09	19.27
ZMAX	490651	48.16	50.18	16.65
ZMAX	490652	43.47	46.22	13.98
ZMAX	490654	46.00	48.13	26.82
ZMAX	490655	46.55	48.83	14.98
ZMAX	490659	45.57	48.11	14.32
ZMAX	490660	39.87	46.11	14.37
ZMAX	490661	45.57	49.72	16.63
ZMAX	490670	45.37	48.30	14.27
ZMAX	490675	41.87	48.11	14.30
ZMAX	490680	47.11	49.55	16.67
ZMAX	490690	45.49	48.39	14.18
ZMAX	490700	53.74	58.68	29.58
ZMAX	490710	47.96	52.09	27.78
ZMAX	490711	52.00	54.43	21.28
ZMAX	490720	50.00	52.14	27.97
ZMAX	490730	50.23	52.56	25.45
ZMAX	490740	49.64	53.25	17.57
ZMAX	490742	58.00	59.32	14.05
ZMAX	490743	48.76	53.27	18.00
ZMAX	490744	49.87	53.27	18.02
ZMAX	490745	57.00	59.15	29.72
ZMAX	490746	57.00	59.23	26.50
ZMAX	490750	51.30	53.51	16.03
ZMAX	490751	55.00	56.23	25.60
ZMAX	490760	50.95	53.93	20.07
ZMAX	490770	51.91	55.20	27.10
ZMAX	490771	55.00	56.06	25.68
ZMAX	490772	56.00	57.26	26.22
ZMAX	490773	56.00	58.54	25.82
ZMAX	490776	56.00	57.12	27.18
ZMAX	490779	55.00	57.10	24.95

ALTERNATIVE 3 5-YEAR 24-HOUR

ZMAX	490780	54.21	57.06	20.42
ZMAX	490790	53.17	55.16	41.82
ZMAX	490791	56.00	57.79	27.22
ZMAX	490792	56.00	57.63	26.03
ZMAX	490794	56.00	57.24	29.38
ZMAX	490795	56.00	56.98	27.40
ZMAX	490800	53.17	55.62	14.60
ZMAX	490801	55.00	57.11	25.08
ZMAX	490802	56.00	57.35	25.72
ZMAX	490803	57.00	57.89	28.22
ZMAX	490804	56.00	57.89	27.72
ZMAX	490900	53.67	55.16	41.90
ZMAX	491010	22.06	24.94	14.25
ZMAX	491019	26.44	27.43	17.70
ZMAX	491020	26.14	28.53	16.78
ZMAX	491021	26.00	28.54	17.08
ZMAX	491022	27.07	28.53	16.93
ZMAX	491040	23.16	25.04	14.20
ZMAX	491041	26.86	29.01	13.92
ZMAX	491042	27.66	28.61	16.12
ZMAX	491043	27.17	28.39	16.33
ZMAX	491044	27.66	28.94	13.97
ZMAX	491060	25.96	28.98	116.38
ZMAX	491080	25.66	29.01	116.38
ZMAX	491100	28.96	30.31	96.63
ZMAX	491102	29.00	31.08	13.28
ZMAX	491120	27.86	30.30	78.73
ZMAX	491121	29.25	32.22	42.45
ZMAX	491122	32.00	33.30	13.50
ZMAX	491123	32.00	33.51	17.65
ZMAX	491140	29.62	32.27	42.22
ZMAX	491160	30.66	32.57	17.13
ZMAX	491180	32.00	34.31	25.73
ZMAX	491200	34.46	36.56	14.65
ZMAX	491220	36.97	38.07	19.53
ZMAX	491221	33.05	36.27	14.00
ZMAX	491222	36.80	38.34	13.12
ZMAX	491223	34.39	36.28	13.98
ZMAX	491240	31.00	32.45	27.82
ZMAX	491260	29.00	31.14	86.48
ZMAX	491280	29.00	31.31	84.15
ZMAX	491285	30.77	38.29	14.47
ZMAX	491300	29.00	31.31	84.15
ZMAX	491302	33.00	36.22	18.52
ZMAX	491320	32.90	36.23	14.03
ZMAX	491340	29.17	31.70	35.60
ZMAX	491344	36.00	37.90	27.73
ZMAX	491342	31.36	34.00	14.92
ZMAX	491360	33.97	36.54	16.25
ZMAX	491380	31.36	35.21	17.23
ZMAX	491382	33.00	33.42	14.47
ZMAX	491384	30.00	32.09	26.75
ZMAX	491387	34.17	38.94	49.45
ZMAX	491388	34.17	40.79	26.65
ZMAX	491390	36.63	38.94	49.28
ZMAX	491391	35.17	38.97	49.33
ZMAX	491393	42.00	44.71	19.67
ZMAX	491394	36.67	40.02	17.42
ZMAX	491395	35.27	38.97	49.28
ZMAX	491396	38.00	40.30	27.32
ZMAX	491397	32.07	38.93	49.48
ZMAX	491398	42.00	44.02	41.60
ZMAX	491399	38.00	40.79	26.65
ZMAX	491400	33.27	35.12	13.50
ZMAX	491401	36.77	42.20	14.83
ZMAX	491402	32.17	38.94	49.32
ZMAX	491404	38.96	40.79	27.17

ALTERNATIVE 3 5-YEAR 24-HOUR

ZMAX	491406	36.77	40.02	17.38
ZMAX	491407	32.17	38.93	49.62
ZMAX	491392	43.00	47.25	27.48
ZMAX	491403	45.00	48.01	29.82
ZMAX	491440	38.17	39.66	27.68
ZMAX	491441	38.54	39.66	27.65
ZMAX	491460	30.71	35.80	24.70
ZMAX	491465	31.27	35.83	25.22
ZMAX	491480	33.87	36.50	13.55
ZMAX	491500	30.00	35.85	26.38
ZMAX	491501	31.17	35.84	26.03
ZMAX	491502	36.00	37.76	27.88
ZMAX	491520	38.15	40.01	13.38
ZMAX	491540	41.00	43.84	27.87
ZMAX	491541	42.00	45.46	27.55
ZMAX	491452	42.00	43.55	26.18
ZMAX	491453	37.18	39.41	13.48
ZMAX	491560	41.00	41.59	28.95
ZMAX	491561	38.00	41.35	29.92
ZMAX	491562	44.00	44.85	31.13
ZMAX	491563	39.00	41.35	29.92
ZMAX	491580	36.55	37.57	28.97
ZMAX	491600	39.73	41.37	240.00
ZMAX	491620	45.57	46.63	28.27
ZMAX	491621	48.00	50.20	27.60
ZMAX	490232	44.00	46.41	16.42
ZMAX	490431	41.00	44.07	26.53
ZMAX	490449	41.00	43.29	17.73
ZMAX	490457	39.00	40.61	22.20
ZMAX	490491	47.00	48.42	29.25
ZMAX	490492	47.00	50.25	29.27
ZMAX	490501	46.00	48.82	14.10
ZMAX	490511	48.00	49.65	28.08
ZMAX	490561	57.00	58.11	27.78
ZMAX	490581	44.00	45.94	15.03
ZMAX	490582	50.00	51.82	18.60
ZMAX	490584	50.00	51.51	26.03
ZMAX	490587	53.00	56.61	16.95
ZMAX	490701	54.00	58.55	20.10
ZMAX	490702	57.00	60.42	25.63
ZMAX	490703	53.74	55.00	14.12
ZMAX	490704	56.00	60.39	14.15
ZMAX	490713	52.00	53.82	29.12
ZMAX	490741	58.00	58.74	28.33
ZMAX	490762	56.00	58.18	27.28
ZMAX	490781	58.00	61.75	17.97
ZMAX	491274	31.22	38.40	14.72
ZMAX	491284	33.92	36.06	14.38
ZMAX	491389	39.00	40.35	27.20
ZMAX	491700	23.00	26.12	24.52
ZMAX	491701	9.70	24.05	37.10
ZMAX	491702	55.00	56.74	35.83
ZMAX	491703	25.00	27.31	18.43
ZMAX	491704	56.00	58.66	16.53
ZMAX	491705	55.80	56.74	35.83
ZMAX	491706	48.90	51.25	27.72
ZMAX	491707	45.00	46.40	30.12
ZMAX	491708	36.00	38.27	28.08
ZMAX	491709	37.00	39.09	16.23
ZMAX	491710	27.00	28.65	16.65
ZMAX	491711	24.00	25.42	40.30
ZMAX	491712	30.33	33.33	29.95
ZMAX	491713	30.00	33.34	30.13
ZMAX	491714	31.00	32.02	21.07
ZMAX	491715	40.17	41.74	25.38
ZMAX	491716	30.00	34.36	28.57
ZMAX	491717	52.00	55.10	26.70

ALTERNATIVE 3 5-YEAR 24-HOUR

ZMAX	491718	34.00	36.29	15.75
ZMAX	491719	42.00	45.70	28.52
ZMAX	491720	38.00	40.31	16.47
ZMAX	491721	38.00	39.98	25.93
ZMAX	491722	39.00	39.57	16.95
ZMAX	491723	29.00	37.08	39.95
ZMAX	491724	29.00	34.36	28.88
ZMAX	491725	33.00	33.95	16.62
ZMAX	491728	30.00	34.61	27.77
ZMAX	491729	27.00	30.19	27.33
ZMAX	491730	26.00	29.17	22.00
ZMAX	491737	38.00	38.53	16.62
ZMAX	491740	37.00	38.49	16.32
ZMAX	491745	37.00	38.92	21.35
ZMAX	491746	37.00	38.72	28.12
ZMAX	491750	44.00	45.43	27.72
ZMAX	491753	49.00	50.77	29.85
ZMAX	490574	41.77	45.22	15.65
ZMAX	491405	42.00	44.34	28.37
ZMAX	490714	52.00	54.09	17.12
ZMAX	490753	51.00	53.78	28.50
ZMAX	491224	39.00	41.41	28.83
ZMAX	491225	41.50	43.41	14.97
ZMAX	491759	39.00	40.31	21.92
ZMAX	491760	39.00	40.27	22.13
ZMAX	491764	38.00	40.00	20.45
ZMAX	491768	38.00	39.63	22.73
ZMAX	499999	35.85	39.59	22.75
ZMAX	499998	35.80	39.58	22.72
ZMAX	499997	35.00	35.80	22.72
ZMAX	491002	30.84	33.34	30.15
ZMAX	491001	28.00	33.34	30.08
ZMAX	100000	99.00	99.00	0.00
ZMAX	100001	99.00	99.00	0.00
ZMAX	100002	99.00	99.00	0.00
ZMAX	100003	99.00	99.00	0.00
ZMAX	100004	99.00	99.00	0.00
ZMAX	100005	99.00	99.00	0.00
ZMAX	100006	99.00	99.00	0.00
ZMAX	100007	99.00	99.00	0.00
ZMAX	100008	99.00	99.00	0.00
ZMAX	100009	99.00	99.00	0.00
ZMAX	100010	99.00	99.00	0.00
ZMAX	100011	99.00	99.00	0.00
ZMAX	100012	99.00	99.00	0.00
ZMAX	100013	99.00	99.00	0.00
ZMAX	100014	99.00	99.00	0.00
ZMAX	100015	99.00	99.00	0.00
ZMAX	100016	99.00	99.00	0.00
ZMAX	100017	99.00	99.00	0.00
ZMAX	100018	99.00	99.00	0.00
ZMAX	100019	99.00	99.00	0.00
ZMAX	100020	99.00	99.00	0.00
ZMAX	100021	99.00	99.00	0.00
ZMAX	100022	99.00	99.00	0.00
ZMAX	100023	99.00	99.00	0.00
ZMAX	100024	99.00	99.00	0.00
ZMAX	100025	99.00	99.00	0.00
ZMAX	100026	99.00	99.00	0.00
ZMAX	100027	99.00	99.00	0.00
ZMAX	100028	99.00	99.00	0.00
ZMAX	100029	99.00	99.00	0.00
ZMAX	100030	99.00	99.00	0.00
ZMAX	100031	99.00	99.00	0.00
ZMAX	100032	99.00	99.00	0.00
ZMAX	100033	99.00	99.00	0.00
ZMAX	100034	99.00	99.00	0.00

ALTERNATIVE 3 5-YEAR 24-HOUR

ZMAX	100035	99.00	99.00	0.00
ZMAX	100036	99.00	99.00	0.00
ZMAX	100037	99.00	99.00	0.00
ZMAX	100038	99.00	99.00	0.00
ZMAX	100039	99.00	99.00	0.00
ZMAX	100040	99.00	99.00	0.00
ZMAX	493010	17.00	22.66	25.45
ZMAX	493020	20.00	22.62	27.23
ZMAX	493030	18.00	24.41	13.30
ZMAX	493040	17.00	22.11	21.47
ZMAX	493060	21.00	21.45	13.35
ZMAX	493070	19.00	25.64	13.65
ZMAX	493090	18.00	22.29	25.08
ZMAX	493100	20.00	21.11	12.67
ZMAX	493110	18.00	19.93	12.95
ZMAX	493120	18.00	20.00	0.00
ZMAX	493130	17.00	20.08	13.00
ZMAX	493140	16.00	18.43	13.70
ZMAX	493150	16.00	19.33	13.83
ZMAX	493180	18.00	24.08	14.90
ZMAX	493185	19.00	23.23	18.43
ZMAX	493190	17.00	19.21	13.03
ZMAX	493195	17.00	20.06	13.65
ZMAX	493200	18.00	20.66	26.17
ZMAX	493210	18.00	19.40	26.33
ZMAX	493215	19.00	20.75	25.27
ZMAX	493220	16.00	18.96	13.32
ZMAX	493230	15.50	18.43	13.70
ZMAX	493240	16.00	19.06	14.82
ZMAX	493250	17.00	24.08	14.90
ZMAX	493260	21.00	24.08	14.97
ZMAX	493270	19.00	24.07	14.97
ZMAX	493280	19.00	23.06	13.03
ZMAX	493290	19.00	22.23	15.38
ZMAX	493310	17.00	21.71	29.07
ZMAX	493320	17.00	20.67	26.17
ZMAX	493330	17.00	20.66	26.10
ZMAX	493340	16.33	20.66	26.17
ZMAX	493350	15.50	17.69	13.17
ZMAX	493360	13.00	18.00	0.00
ZMAX	493370	14.61	17.75	13.97
ZMAX	493380	14.50	17.22	20.02
ZMAX	493390	14.50	17.86	13.77
ZMAX	493400	13.50	17.23	20.02
ZMAX	493410	12.50	17.22	20.02
ZMAX	493420	13.50	16.28	0.03
ZMAX	493430	12.44	15.94	0.07
ZMAX	493440	15.50	18.71	28.12
ZMAX	493450	18.00	19.28	26.65
ZMAX	493470	16.00	19.28	26.65
ZMAX	493480	15.50	19.28	26.65
ZMAX	493500	12.27	16.31	14.33
ZMAX	493505	12.27	14.74	16.27
ZMAX	493520	11.76	14.31	17.70
ZMAX	493525	11.00	14.30	18.20
ZMAX	493530	14.50	17.13	16.60
ZMAX	493535	15.00	17.13	16.60
ZMAX	493540	13.50	16.00	0.00
ZMAX	493545	9.65	14.28	18.33
ZMAX	493550	14.50	15.20	12.70
ZMAX	493555	13.50	14.81	12.50
ZMAX	494010	24.80	26.00	0.00
ZMAX	494020	22.90	25.55	12.93
ZMAX	494025	20.00	21.16	12.95
ZMAX	494030	22.00	22.69	13.00
ZMAX	494040	19.00	20.45	13.07
ZMAX	494045	18.70	20.44	13.07

ALTERNATIVE 3 5-YEAR 24-HOUR

ZMAX	494050	20.00	25.00	0.00
ZMAX	494060	25.00	26.00	0.00
ZMAX	494070	18.00	19.77	20.30
ZMAX	494072	19.00	22.01	24.17
ZMAX	494074	20.00	21.05	13.12
ZMAX	494076	19.00	21.05	12.68
ZMAX	494078	21.00	22.12	12.85
ZMAX	494080	18.00	20.11	13.10
ZMAX	494100	17.00	19.28	26.68
ZMAX	494110	15.29	19.28	26.68
ZMAX	494120	18.00	19.28	26.65
ZMAX	494130	17.00	19.28	26.67
ZMAX	494140	14.50	17.72	16.00
ZMAX	494150	15.00	19.28	26.68
ZMAX	494170	18.00	19.77	20.25
ZMAX	494180	17.00	19.72	21.00
ZMAX	494185	17.00	19.76	20.53
ZMAX	494190	17.00	19.75	20.68
ZMAX	494200	15.00	19.28	26.68
ZMAX	494205	17.00	19.28	26.68
ZMAX	494210	14.87	19.72	21.00
ZMAX	494220	15.75	19.72	21.00
ZMAX	494230	16.00	19.72	21.00
ZMAX	494240	15.71	19.73	21.00
ZMAX	494250	16.70	19.74	20.87
ZMAX	495010	20.00	23.20	0.00
ZMAX	495020	15.50	18.71	28.10
ZMAX	495030	15.50	18.71	28.10
ZMAX	495035	19.00	20.34	24.98
ZMAX	495038	17.00	18.10	12.90
ZMAX	495040	16.00	18.63	12.92
ZMAX	495045	15.00	15.77	12.73
ZMAX	495050	15.50	18.34	24.92
ZMAX	495055	15.50	16.79	12.95
ZMAX	495060	14.80	15.76	12.73
ZMAX	495065	14.50	16.15	13.05
ZMAX	495070	11.50	13.01	24.53
ZMAX	495075	11.50	12.62	26.10
ZMAX	495080	13.18	14.00	0.00
ZMAX	495085	13.00	15.02	20.35
ZMAX	495090	11.42	12.99	14.20
ZMAX	495100	15.00	17.66	17.45
ZMAX	495110	14.50	17.04	12.75
ZMAX	495120	13.00	14.12	13.35
ZMAX	495125	14.42	15.96	14.05
ZMAX	495140	14.50	16.55	17.73
ZMAX	495145	14.50	16.39	240.00
ZMAX	495150	13.00	14.12	13.35
ZMAX	495152	12.50	15.08	25.55
ZMAX	495154	12.50	15.43	25.97
ZMAX	495155	12.50	15.43	25.97
ZMAX	495156	12.50	13.50	0.00
ZMAX	495160	12.50	15.34	25.58
ZMAX	495162	13.50	14.84	25.57
ZMAX	495165	13.50	15.49	25.70
ZMAX	495170	12.50	15.70	24.82
ZMAX	495180	10.45	12.48	0.00
ZMAX	495210	12.50	13.90	25.12
ZMAX	495215	12.50	14.12	13.35
ZMAX	495230	8.82	11.69	13.03
ZMAX	495235	10.50	13.33	24.80
ZMAX	495240	8.50	10.36	29.48
ZMAX	495260	13.00	15.50	23.82
ZMAX	495270	12.50	14.11	13.35
ZMAX	495275	11.50	13.10	13.50
ZMAX	495280	10.90	11.14	13.52
ZMAX	495300	13.94	15.46	14.27

ALTERNATIVE 3 5-YEAR 24-HOUR

ZMAX	495302	13.90	15.40	14.28
ZMAX	495304	13.31	15.27	13.30
ZMAX	495306	12.73	14.10	14.53
ZMAX	495308	12.18	14.02	14.82
ZMAX	495310	11.49	12.95	13.55
ZMAX	495312	10.92	12.93	13.43
ZMAX	495314	10.43	12.63	26.13
ZMAX	495316	11.80	14.11	12.53
ZMAX	495320	9.75	12.63	26.17
ZMAX	495322	9.64	13.66	19.12
ZMAX	495324	9.44	13.49	19.48
ZMAX	495326	9.30	13.10	23.45
ZMAX	495328	9.43	13.01	24.57
ZMAX	495330	9.20	13.01	24.53
ZMAX	495332	9.02	13.01	24.62
ZMAX	495334	8.90	12.84	24.85
ZMAX	495336	8.72	12.63	26.08
ZMAX	495338	8.53	12.62	26.15
ZMAX	495340	8.40	12.62	26.23
ZMAX	495342	8.23	12.61	26.33
ZMAX	495344	8.04	12.48	26.57
ZMAX	495346	7.85	12.23	27.47
ZMAX	495348	7.66	12.00	27.82
ZMAX	495350	7.47	10.73	28.35
ZMAX	495352	7.34	10.37	29.37
ZMAX	495354	7.26	10.36	29.37
ZMAX	495356	7.19	10.34	29.57
ZMAX	496010	14.50	16.21	0.10
ZMAX	496020	14.50	18.80	0.00
ZMAX	496030	14.50	16.31	0.02
ZMAX	496060	16.60	16.75	12.83
ZMAX	496065	14.00	16.25	0.08
ZMAX	496070	14.00	16.22	0.10
ZMAX	496080	14.20	18.00	0.00
ZMAX	496090	14.00	18.00	0.00
ZMAX	496100	12.50	15.90	0.07
ZMAX	496110	11.00	15.37	0.72
ZMAX	496120	13.00	15.09	14.60
ZMAX	496125	12.00	13.69	19.12
ZMAX	496130	13.00	15.27	1.15
ZMAX	496150	14.00	15.34	0.77
ZMAX	496160	11.00	13.69	19.12
ZMAX	496170	12.00	15.36	0.73
ZMAX	496175	12.00	14.83	12.55
ZMAX	496180	11.00	13.14	13.55
ZMAX	496190	11.00	13.14	13.57
ZMAX	496200	10.50	11.24	0.73
ZMAX	496232	16.00	18.00	0.00
ZMAX	496234	14.00	16.36	0.15
ZMAX	496235	15.00	15.39	0.12
ZMAX	496240	14.28	15.82	0.03
ZMAX	496245	13.50	15.15	0.13
ZMAX	496260	13.50	15.02	0.30
ZMAX	496270	12.50	13.66	13.00
ZMAX	496280	9.50	12.04	0.63
ZMAX	496310	10.50	11.29	0.68
ZMAX	496320	10.50	11.17	13.70
ZMAX	496340	4.43	8.79	13.70
ZMAX	496350	8.50	9.88	25.07
ZMAX	496360	7.50	8.97	25.27
ZMAX	496370	6.50	8.18	14.23
ZMAX	496380	5.50	7.81	13.72
ZMAX	496390	4.41	7.86	13.73
ZMAX	496395	4.50	7.08	15.50
ZMAX	496400	6.50	7.80	13.73
ZMAX	496410	-0.65	6.67	15.82
ZMAX	496420	3.50	6.26	16.65

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ZMAX	496430	5.50	9.04	14.10
ZMAX	496440	5.50	7.82	27.10
ZMAX	496450	3.50	7.82	27.10
ZMAX	496460	5.50	9.98	26.00
ZMAX	496470	3.00	6.51	16.67
ZMAX	496480	6.50	8.35	25.10
ZMAX	496485	7.50	10.67	25.40
ZMAX	496490	3.50	8.27	24.98
ZMAX	496500	6.50	11.00	0.00
ZMAX	496510	4.50	7.41	25.10
ZMAX	496515	4.50	7.97	16.62
ZMAX	496520	5.50	7.20	0.17
ZMAX	496530	5.50	6.93	13.82
ZMAX	496540	6.50	7.04	12.72
ZMAX	496545	4.00	6.51	16.67
ZMAX	496550	4.00	6.51	16.67
ZMAX	496560	3.00	6.51	16.67
ZMAX	496570	5.50	6.98	12.68
ZMAX	496580	7.50	10.88	24.98
ZMAX	496590	4.50	6.67	15.82
ZMAX	496600	-1.88	6.50	16.62
ZMAX	496610	4.50	7.18	13.22
ZMAX	496620	4.50	7.17	13.23
ZMAX	497010	11.00	13.88	13.82
ZMAX	497020	3.50	10.14	30.02
ZMAX	497025	8.50	11.09	12.88
ZMAX	497035	6.50	10.20	13.87
ZMAX	497045	4.50	7.67	14.68
ZMAX	497050	3.50	7.66	14.70
ZMAX	497055	3.50	6.68	13.62
ZMAX	497065	1.88	5.09	14.28
ZMAX	497070	8.50	9.97	12.95
ZMAX	497080	2.06	6.03	0.00
ZMAX	497085	6.50	10.02	30.50
ZMAX	497086	6.32	10.33	29.55
ZMAX	497088	5.89	10.14	30.00
ZMAX	497090	4.32	10.04	30.50
ZMAX	497092	3.75	9.33	30.50
ZMAX	497094	2.75	8.88	30.52
ZMAX	497096	2.30	8.32	30.52
ZMAX	497098	1.85	8.16	30.52
ZMAX	497100	-0.16	6.49	30.40
ZMAX	497102	-1.57	5.63	30.38
ZMAX	497104	-2.19	5.46	15.07
ZMAX	497105	-1.00	5.45	15.07
ZMAX	497106	-1.37	4.47	17.25
ZMAX	497107	-2.07	4.43	17.28
ZMAX	497108	-0.37	4.38	17.27
ZMAX	497109	-4.75	4.46	17.20
ZMAX	497111	-3.66	4.37	17.17
ZMAX	497112	-3.66	4.69	17.27
ZMAX	497113	-5.33	4.78	17.25
ZMAX	497110	-0.19	7.02	25.12
ZMAX	497120	1.50	4.45	17.28
ZMAX	497122	4.50	5.42	13.18
ZMAX	497124	4.00	4.48	0.00
ZMAX	497130	-0.21	7.01	25.13
ZMAX	497140	4.00	6.50	0.00
ZMAX	497150	5.40	6.88	12.50
ZMAX	497160	-1.85	6.26	16.65
ZMAX	497161	-2.25	5.93	16.70
ZMAX	497162	-2.86	5.26	16.88
ZMAX	497170	-6.19	3.24	17.22
ZMAX	500010	6.94	10.77	12.72
ZMAX	500020	8.41	9.59	13.77
ZMAX	500025	6.13	9.70	12.83
ZMAX	500030	5.77	9.61	12.88

ALTERNATIVE 3 5-YEAR 24-HOUR

ZMAX	500040	5.07	9.44	12.97
ZMAX	500050	4.00	8.55	12.85
ZMAX	500110	7.43	10.42	12.73
ZMAX	500120	6.16	10.03	31.32
ZMAX	500130	8.00	10.81	13.42
ZMAX	500140	6.39	10.03	31.27
ZMAX	500210	4.00	10.03	31.40
ZMAX	500220	6.91	10.84	12.57
ZMAX	500300	5.00	9.92	12.78
ZMAX	9498000	-6.69	2.96	0.00
ZMAX	9496630	12.00	12.00	0.00
ZMAX	9493020	20.00	20.00	0.00
ZMAX	9493060	22.50	22.50	0.00
ZMAX	9493190	19.00	19.00	0.00
ZMAX	9493140	19.98	19.98	0.00
ZMAX	9493150	19.70	19.70	0.00
ZMAX	9493240	19.00	19.00	0.00
ZMAX	9495030	17.48	17.48	0.00
ZMAX	9495010	23.20	23.20	0.00
ZMAX	9495085	15.10	15.10	0.00
ZMAX	9495140	16.00	16.00	0.00
ZMAX	9495145	16.00	16.00	0.00
ZMAX	9495160	15.50	15.50	0.00
ZMAX	9496320	11.00	11.00	0.00
ZMAX	9496260	14.00	14.00	0.00
ZMAX	9494250	18.00	18.00	0.00
ZMAX	9494190	18.50	18.50	0.00
ZMAX	100043	99.00	99.00	0.00
ZMAX	100044	99.00	99.00	0.00
ZMAX	100045	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100047	99.00	99.00	0.00
ZMAX	100048	99.00	99.00	0.00
ZMAX	100049	99.00	99.00	0.00
ZMAX	100050	99.00	99.00	0.00
ZMAX	100051	99.00	99.00	0.00
ZMAX	100052	99.00	99.00	0.00
ZMAX	100053	99.00	99.00	0.00
ZMAX	100054	99.00	99.00	0.00
ZMAX	100055	99.00	99.00	0.00
ZMAX	100056	99.00	99.00	0.00
ZMAX	100057	99.00	99.00	0.00
ZMAX	100058	99.00	99.00	0.00
ZMAX	100059	99.00	99.00	0.00
ZMAX	100060	99.00	99.00	0.00
ZMAX	100061	99.00	99.00	0.00
ZMAX	100062	99.00	99.00	0.00
ZMAX	100063	99.00	99.00	0.00
ZMAX	100064	99.00	99.00	0.00
ZMAX	100065	99.00	99.00	0.00
ZMAX	100066	99.00	99.00	0.00
ZMAX	100067	99.00	99.00	0.00
ZMAX	100068	99.00	99.00	0.00
ZMAX	100069	99.00	99.00	0.00
ZMAX	100070	99.00	99.00	0.00
ZMAX	100071	99.00	99.00	0.00
ZMAX	100072	99.00	99.00	0.00
ZMAX	100073	99.00	99.00	0.00
ZMAX	100074	99.00	99.00	0.00
ZMAX	100075	99.00	99.00	0.00
ZMAX	100076	99.00	99.00	0.00
ZMAX	100077	99.00	99.00	0.00
ZMAX	100078	99.00	99.00	0.00
ZMAX	100079	99.00	99.00	0.00
ZMAX	100080	99.00	99.00	0.00
ZMAX	100081	99.00	99.00	0.00

ALTERNATIVE 3 5-YEAR 24-HOUR

ZMAX	100082	99.00	99.00	0.00
ZMAX	100083	99.00	99.00	0.00
ZMAX	100084	99.00	99.00	0.00
ZMAX	100085	99.00	99.00	0.00
ZMAX	100086	99.00	99.00	0.00
ZMAX	100087	99.00	99.00	0.00
ZMAX	100088	99.00	99.00	0.00
ZMAX	100089	99.00	99.00	0.00
ZMAX	494151	15.00	17.00	0.00
ZMAX	494111	15.29	17.05	26.68
ZMAX	493341	16.33	18.60	0.00
ZMAX	493481	15.51	16.31	14.35
ZMAX	494211	14.87	20.19	0.00
ZMAX	494221	15.75	17.79	21.02
ZMAX	494231	16.04	18.77	0.00
ZMAX	494241	15.77	18.95	0.00

ALTERNATIVE 3 25-YEAR 24-HOUR

	JUNC ID	INVT	Z_MAX	T_MAX
ZMAX	490000	24.23	28.35	78.80
ZMAX	490004	26.46	28.52	23.28
ZMAX	490002	20.93	28.35	78.78
ZMAX	490008	27.00	28.75	30.02
ZMAX	490010	26.16	28.77	27.03
ZMAX	490020	24.36	28.66	32.30
ZMAX	490030	26.46	28.67	26.00
ZMAX	490040	29.00	30.43	26.53
ZMAX	490050	25.16	28.78	15.58
ZMAX	490070	25.96	29.85	23.03
ZMAX	490071	29.00	30.10	14.08
ZMAX	490072	27.00	28.61	27.35
ZMAX	490073	30.00	32.38	13.73
ZMAX	490080	27.66	30.09	20.65
ZMAX	490090	28.00	31.09	17.40
ZMAX	490100	29.00	29.86	23.15
ZMAX	490110	26.16	30.42	21.98
ZMAX	490120	30.64	33.28	88.20
ZMAX	490130	28.96	33.31	88.20
ZMAX	490140	29.26	31.82	240.00
ZMAX	490141	31.00	32.77	26.40
ZMAX	490150	29.89	34.11	86.20
ZMAX	490160	29.77	35.55	76.17
ZMAX	490170	35.00	38.95	18.53
ZMAX	490180	32.66	38.72	29.67
ZMAX	490181	33.75	38.72	29.78
ZMAX	490200	36.66	38.92	14.87
ZMAX	490210	36.29	38.67	18.67
ZMAX	490211	39.00	40.68	15.37
ZMAX	490220	40.04	42.87	15.73
ZMAX	490221	42.00	45.25	24.38
ZMAX	490230	39.95	41.46	25.25
ZMAX	490240	26.36	31.08	20.87
ZMAX	490250	29.00	33.11	18.93
ZMAX	490251	33.00	35.73	29.93
ZMAX	490260	31.16	34.72	19.57
ZMAX	490261	34.00	36.25	13.68
ZMAX	490263	34.00	35.98	28.08
ZMAX	490264	33.00	35.25	19.08
ZMAX	490266	34.00	36.12	16.08
ZMAX	490270	35.00	38.99	14.97
ZMAX	490280	32.70	35.73	29.93
ZMAX	490281	32.70	35.73	29.90
ZMAX	490290	31.00	34.93	16.10
ZMAX	490300	31.86	34.84	17.57
ZMAX	490310	33.00	37.13	17.63
ZMAX	490320	34.00	37.98	16.77
ZMAX	490321	36.00	38.60	24.48
ZMAX	490330	37.00	38.74	15.72
ZMAX	490340	35.00	37.94	15.93
ZMAX	490350	36.00	38.77	15.67
ZMAX	490370	33.96	36.43	57.00
ZMAX	490375	35.00	38.61	54.25
ZMAX	490390	34.56	38.71	19.92
ZMAX	490391	36.80	38.00	21.57
ZMAX	490392	36.40	37.07	15.38
ZMAX	490400	37.00	39.01	16.07
ZMAX	490401	37.00	39.71	25.98
ZMAX	490410	35.46	38.61	54.18
ZMAX	490411	36.00	38.61	54.30
ZMAX	490420	35.00	40.76	48.58
ZMAX	490421	39.00	40.16	28.50
ZMAX	490422	39.00	41.18	16.93
ZMAX	490425	38.00	40.76	49.17
ZMAX	490430	35.47	41.32	28.23
ZMAX	490440	40.00	43.49	26.10

ALTERNATIVE 3 25-YEAR 24-HOUR

ZMAX	490450	39.00	40.86	25.57
ZMAX	490451	39.00	40.57	63.08
ZMAX	490453	39.00	40.57	63.08
ZMAX	490455	39.00	40.77	18.40
ZMAX	490460	43.00	46.56	27.58
ZMAX	490470	40.00	42.50	36.22
ZMAX	490480	39.67	42.50	36.17
ZMAX	490490	40.38	42.78	21.83
ZMAX	490500	41.00	45.04	35.87
ZMAX	490510	49.00	51.19	17.32
ZMAX	490520	43.47	49.71	24.33
ZMAX	490530	51.00	54.87	82.32
ZMAX	490535	56.47	58.48	15.63
ZMAX	490540	56.00	58.76	15.58
ZMAX	490550	48.00	49.84	16.68
ZMAX	490555	48.07	52.12	13.70
ZMAX	490560	49.00	50.03	16.08
ZMAX	490580	35.47	41.48	28.00
ZMAX	490590	48.37	49.84	25.68
ZMAX	490600	42.54	44.75	15.92
ZMAX	490610	39.77	42.47	26.28
ZMAX	490612	42.00	44.27	15.28
ZMAX	490620	41.70	43.14	15.70
ZMAX	490621	44.00	45.43	18.08
ZMAX	490630	42.17	45.13	22.68
ZMAX	490637	41.53	43.06	14.32
ZMAX	490638	44.12	44.62	24.58
ZMAX	490639	48.72	49.71	15.05
ZMAX	490640	37.57	41.57	26.95
ZMAX	490641	44.00	48.12	24.27
ZMAX	490642	45.16	48.40	16.60
ZMAX	490643	39.87	45.63	16.23
ZMAX	490644	47.67	49.63	15.20
ZMAX	490645	48.67	51.72	14.87
ZMAX	490646	41.53	47.77	14.02
ZMAX	490650	43.27	45.90	17.90
ZMAX	490651	48.16	50.96	16.93
ZMAX	490652	43.47	46.34	14.20
ZMAX	490654	46.00	48.44	17.00
ZMAX	490655	46.55	48.90	14.03
ZMAX	490659	45.57	49.12	15.45
ZMAX	490660	39.87	47.60	15.55
ZMAX	490661	45.57	50.45	15.18
ZMAX	490670	45.37	49.21	15.73
ZMAX	490675	41.87	49.03	15.62
ZMAX	490680	47.11	50.23	16.72
ZMAX	490690	45.49	49.30	15.95
ZMAX	490700	53.74	59.45	29.95
ZMAX	490710	47.96	52.70	27.10
ZMAX	490711	52.00	54.53	16.28
ZMAX	490720	50.00	52.67	27.00
ZMAX	490730	50.23	53.77	26.23
ZMAX	490740	49.64	54.17	16.68
ZMAX	490742	58.00	59.70	28.00
ZMAX	490743	48.76	54.22	17.32
ZMAX	490744	49.87	54.22	17.32
ZMAX	490745	57.00	59.70	28.00
ZMAX	490746	57.00	60.23	26.48
ZMAX	490750	51.30	54.18	17.95
ZMAX	490751	55.00	56.59	25.63
ZMAX	490760	50.95	54.43	24.75
ZMAX	490770	51.91	55.55	26.07
ZMAX	490771	55.00	56.66	25.73
ZMAX	490772	56.00	57.91	26.25
ZMAX	490773	56.00	59.07	25.82
ZMAX	490776	56.00	57.62	25.05
ZMAX	490779	55.00	57.37	16.63

ALTERNATIVE 3 25-YEAR 24-HOUR

ZMAX	490780	54.21	57.67	22.25
ZMAX	490790	53.17	55.58	28.32
ZMAX	490791	56.00	58.61	27.17
ZMAX	490792	56.00	58.35	25.97
ZMAX	490794	56.00	57.67	29.38
ZMAX	490795	56.00	57.44	27.33
ZMAX	490800	53.17	55.96	14.97
ZMAX	490801	55.00	57.44	16.42
ZMAX	490802	56.00	58.00	25.58
ZMAX	490803	57.00	58.52	27.98
ZMAX	490804	56.00	58.52	27.70
ZMAX	490900	53.67	55.58	28.42
ZMAX	491010	22.06	25.52	14.12
ZMAX	491019	26.44	27.85	18.53
ZMAX	491020	26.14	29.05	16.60
ZMAX	491021	26.00	29.05	17.78
ZMAX	491022	27.07	29.04	17.30
ZMAX	491040	23.16	25.71	14.08
ZMAX	491041	26.86	29.46	13.87
ZMAX	491042	27.66	28.87	16.80
ZMAX	491043	27.17	28.78	16.83
ZMAX	491044	27.66	29.37	13.92
ZMAX	491060	25.96	29.82	63.60
ZMAX	491080	25.66	30.05	63.60
ZMAX	491100	28.96	31.12	62.93
ZMAX	491102	29.00	31.46	13.23
ZMAX	491120	27.86	31.87	84.13
ZMAX	491121	29.25	32.32	29.87
ZMAX	491122	32.00	33.38	13.42
ZMAX	491123	32.00	33.78	17.00
ZMAX	491140	29.62	32.47	29.55
ZMAX	491160	30.66	33.39	16.55
ZMAX	491180	32.00	35.42	26.15
ZMAX	491200	34.46	37.36	15.20
ZMAX	491220	36.97	38.44	19.33
ZMAX	491221	33.05	36.58	15.85
ZMAX	491222	36.80	38.95	13.12
ZMAX	491223	34.39	36.59	15.83
ZMAX	491240	31.00	33.19	27.75
ZMAX	491260	29.00	31.91	41.52
ZMAX	491280	29.00	32.00	38.45
ZMAX	491285	30.77	39.04	14.15
ZMAX	491300	29.00	31.92	41.52
ZMAX	491302	33.00	36.56	16.10
ZMAX	491320	32.90	36.55	15.93
ZMAX	491340	29.17	32.95	42.82
ZMAX	491344	36.00	38.48	27.60
ZMAX	491342	31.36	34.15	14.47
ZMAX	491360	33.97	36.88	16.73
ZMAX	491380	31.36	35.65	16.87
ZMAX	491382	33.00	33.59	14.38
ZMAX	491384	30.00	32.34	19.10
ZMAX	491387	34.17	39.59	25.35
ZMAX	491388	34.17	41.26	23.77
ZMAX	491390	36.63	39.63	15.52
ZMAX	491391	35.17	39.68	25.27
ZMAX	491393	42.00	45.45	23.05
ZMAX	491394	36.67	40.94	15.98
ZMAX	491395	35.27	39.68	25.32
ZMAX	491396	38.00	41.23	25.05
ZMAX	491397	32.07	39.50	25.43
ZMAX	491398	42.00	44.13	19.02
ZMAX	491399	38.00	41.28	23.77
ZMAX	491400	33.27	38.16	25.80
ZMAX	491401	36.77	42.43	14.37
ZMAX	491402	32.17	39.56	25.02
ZMAX	491404	38.96	41.29	23.82

ALTERNATIVE 3 25-YEAR 24-HOUR

ZMAX	491406	36.77	40.95	15.97
ZMAX	491407	32.17	39.52	25.22
ZMAX	491392	43.00	47.53	19.02
ZMAX	491403	45.00	48.19	18.73
ZMAX	491440	38.17	39.98	20.50
ZMAX	491441	38.54	39.98	20.45
ZMAX	491460	30.71	36.68	14.35
ZMAX	491465	31.27	36.50	25.52
ZMAX	491480	33.87	36.84	13.53
ZMAX	491500	30.00	36.55	27.15
ZMAX	491501	31.17	36.54	27.22
ZMAX	491502	36.00	38.05	24.28
ZMAX	491520	38.15	41.52	13.77
ZMAX	491540	41.00	44.22	16.58
ZMAX	491541	42.00	46.58	27.38
ZMAX	491452	42.00	44.02	19.80
ZMAX	491453	37.18	40.18	13.47
ZMAX	491560	41.00	41.97	29.05
ZMAX	491561	38.00	42.12	29.67
ZMAX	491562	44.00	45.31	30.95
ZMAX	491563	39.00	42.12	29.67
ZMAX	491580	36.55	38.25	240.00
ZMAX	491600	39.73	42.59	159.15
ZMAX	491620	45.57	47.10	27.02
ZMAX	491621	48.00	50.63	27.65
ZMAX	490232	44.00	46.68	15.08
ZMAX	490431	41.00	44.60	26.55
ZMAX	490449	41.00	43.73	16.33
ZMAX	490457	39.00	40.79	18.67
ZMAX	490491	47.00	50.31	219.30
ZMAX	490492	47.00	51.03	17.72
ZMAX	490501	46.00	49.01	13.98
ZMAX	490511	48.00	50.60	28.05
ZMAX	490561	57.00	58.80	27.85
ZMAX	490581	44.00	46.11	14.50
ZMAX	490582	50.00	52.16	14.25
ZMAX	490584	50.00	52.32	25.10
ZMAX	490587	53.00	57.25	14.03
ZMAX	490701	54.00	58.71	15.35
ZMAX	490702	57.00	60.53	15.67
ZMAX	490703	53.74	55.40	14.15
ZMAX	490704	56.00	60.69	13.47
ZMAX	490713	52.00	54.37	19.92
ZMAX	490741	58.00	59.18	28.28
ZMAX	490762	56.00	59.03	25.53
ZMAX	490781	58.00	62.09	17.28
ZMAX	491274	31.22	39.06	14.17
ZMAX	491284	33.92	36.96	14.38
ZMAX	491389	39.00	40.60	20.42
ZMAX	491700	23.00	27.53	20.18
ZMAX	491701	9.70	25.35	29.83
ZMAX	491702	55.00	57.51	32.57
ZMAX	491703	25.00	27.50	15.93
ZMAX	491704	56.00	58.78	15.47
ZMAX	491705	55.80	57.51	32.57
ZMAX	491706	48.90	51.94	27.80
ZMAX	491707	45.00	46.96	30.25
ZMAX	491708	36.00	38.59	24.65
ZMAX	491709	37.00	39.24	15.80
ZMAX	491710	27.00	28.89	15.88
ZMAX	491711	24.00	26.41	25.53
ZMAX	491712	30.33	34.47	29.73
ZMAX	491713	30.00	34.07	62.08
ZMAX	491714	31.00	32.38	17.52
ZMAX	491715	40.17	42.50	36.27
ZMAX	491716	30.00	34.88	25.02
ZMAX	491717	52.00	55.24	16.38

ALTERNATIVE 3 25-YEAR 24-HOUR

ZMAX	491718	34.00	36.55	14.83
ZMAX	491719	42.00	46.66	28.32
ZMAX	491720	38.00	40.61	15.87
ZMAX	491721	38.00	40.53	25.87
ZMAX	491722	39.00	39.92	17.15
ZMAX	491723	29.00	37.81	56.38
ZMAX	491724	29.00	34.88	24.98
ZMAX	491725	33.00	34.40	16.27
ZMAX	491728	30.00	35.21	15.82
ZMAX	491729	27.00	31.35	24.37
ZMAX	491730	26.00	29.87	18.22
ZMAX	491737	38.00	38.64	15.87
ZMAX	491740	37.00	38.62	15.67
ZMAX	491745	37.00	39.14	17.67
ZMAX	491746	37.00	39.08	26.35
ZMAX	491750	44.00	46.32	27.67
ZMAX	491753	49.00	51.45	21.95
ZMAX	490574	41.77	46.00	16.02
ZMAX	491405	42.00	44.60	17.08
ZMAX	490714	52.00	54.56	16.50
ZMAX	490753	51.00	54.46	29.98
ZMAX	491224	39.00	42.78	28.87
ZMAX	491225	41.50	43.96	14.92
ZMAX	491759	39.00	40.68	22.40
ZMAX	491760	39.00	40.61	22.92
ZMAX	491764	38.00	40.38	24.43
ZMAX	491768	38.00	40.29	24.43
ZMAX	499999	35.85	40.24	24.52
ZMAX	499998	35.80	40.22	24.48
ZMAX	499997	35.00	36.00	24.48
ZMAX	491002	30.84	34.07	61.93
ZMAX	491001	28.00	34.07	61.62
ZMAX	100000	99.00	99.00	0.00
ZMAX	100001	99.00	99.00	0.00
ZMAX	100002	99.00	99.00	0.00
ZMAX	100003	99.00	99.00	0.00
ZMAX	100004	99.00	99.00	0.00
ZMAX	100005	99.00	99.00	0.00
ZMAX	100006	99.00	99.00	0.00
ZMAX	100007	99.00	99.00	0.00
ZMAX	100008	99.00	99.00	0.00
ZMAX	100009	99.00	99.00	0.00
ZMAX	100010	99.00	99.00	0.00
ZMAX	100011	99.00	99.00	0.00
ZMAX	100012	99.00	99.00	0.00
ZMAX	100013	99.00	99.00	0.00
ZMAX	100014	99.00	99.00	0.00
ZMAX	100015	99.00	99.00	0.00
ZMAX	100016	99.00	99.00	0.00
ZMAX	100017	99.00	99.00	0.00
ZMAX	100018	99.00	99.00	0.00
ZMAX	100019	99.00	99.00	0.00
ZMAX	100020	99.00	99.00	0.00
ZMAX	100021	99.00	99.00	0.00
ZMAX	100022	99.00	99.00	0.00
ZMAX	100023	99.00	99.00	0.00
ZMAX	100024	99.00	99.00	0.00
ZMAX	100025	99.00	99.00	0.00
ZMAX	100026	99.00	99.00	0.00
ZMAX	100027	99.00	99.00	0.00
ZMAX	100028	99.00	99.00	0.00
ZMAX	100029	99.00	99.00	0.00
ZMAX	100030	99.00	99.00	0.00
ZMAX	100031	99.00	99.00	0.00
ZMAX	100032	99.00	99.00	0.00
ZMAX	100033	99.00	99.00	0.00
ZMAX	100034	99.00	99.00	0.00

ALTERNATIVE 3 25-YEAR 24-HOUR

ZMAX	100035	99.00	99.00	0.00
ZMAX	100036	99.00	99.00	0.00
ZMAX	100037	99.00	99.00	0.00
ZMAX	100038	99.00	99.00	0.00
ZMAX	100039	99.00	99.00	0.00
ZMAX	100040	99.00	99.00	0.00
ZMAX	493010	17.00	23.49	25.48
ZMAX	493020	20.00	23.04	18.10
ZMAX	493030	18.00	24.47	13.05
ZMAX	493040	17.00	22.33	17.12
ZMAX	493060	21.00	21.50	13.27
ZMAX	493070	19.00	26.94	13.57
ZMAX	493090	18.00	23.45	25.08
ZMAX	493100	20.00	21.15	12.67
ZMAX	493110	18.00	20.02	12.90
ZMAX	493120	18.00	20.00	0.00
ZMAX	493130	17.00	20.16	12.70
ZMAX	493140	16.00	18.79	13.40
ZMAX	493150	16.00	19.40	13.03
ZMAX	493180	18.00	24.21	14.08
ZMAX	493185	19.00	24.19	14.08
ZMAX	493190	17.00	19.35	12.98
ZMAX	493195	17.00	20.16	13.05
ZMAX	493200	18.00	21.10	17.28
ZMAX	493210	18.00	19.95	17.38
ZMAX	493215	19.00	21.12	17.15
ZMAX	493220	16.00	19.16	17.57
ZMAX	493230	15.50	18.79	13.40
ZMAX	493240	16.00	19.33	27.43
ZMAX	493250	17.00	24.21	14.08
ZMAX	493260	21.00	24.19	13.65
ZMAX	493270	19.00	24.18	13.65
ZMAX	493280	19.00	23.09	13.00
ZMAX	493290	19.00	22.29	13.02
ZMAX	493310	17.00	23.75	79.22
ZMAX	493320	17.00	21.12	17.28
ZMAX	493330	17.00	21.12	17.10
ZMAX	493340	16.33	21.11	17.30
ZMAX	493350	15.50	17.76	13.03
ZMAX	493360	13.00	18.00	0.00
ZMAX	493370	14.61	18.28	13.85
ZMAX	493380	14.50	17.67	18.08
ZMAX	493390	14.50	18.09	13.43
ZMAX	493400	13.50	17.69	18.07
ZMAX	493410	12.50	17.68	18.07
ZMAX	493420	13.50	16.28	0.03
ZMAX	493430	12.44	15.94	0.07
ZMAX	493440	15.50	19.33	27.43
ZMAX	493450	18.00	19.81	25.70
ZMAX	493470	16.00	19.81	25.70
ZMAX	493480	15.50	19.81	25.70
ZMAX	493500	12.27	16.55	14.27
ZMAX	493505	12.27	15.43	16.27
ZMAX	493520	11.76	14.86	18.08
ZMAX	493525	11.00	14.84	18.27
ZMAX	493530	14.50	17.29	13.67
ZMAX	493535	15.00	17.29	13.67
ZMAX	493540	13.50	16.00	0.00
ZMAX	493545	9.65	14.82	18.32
ZMAX	493550	14.50	15.24	12.67
ZMAX	493555	13.50	14.88	13.63
ZMAX	494010	24.80	26.00	0.00
ZMAX	494020	22.90	25.59	12.67
ZMAX	494025	20.00	21.25	12.73
ZMAX	494030	22.00	22.74	13.00
ZMAX	494040	19.00	20.56	13.03
ZMAX	494045	18.70	20.56	13.03

ALTERNATIVE 3 25-YEAR 24-HOUR

ZMAX	494050	20.00	25.00	0.00
ZMAX	494060	25.00	26.00	0.00
ZMAX	494070	18.00	20.23	20.85
ZMAX	494072	19.00	22.07	13.53
ZMAX	494074	20.00	21.08	12.73
ZMAX	494076	19.00	21.08	12.72
ZMAX	494078	21.00	22.18	12.73
ZMAX	494080	18.00	20.17	12.83
ZMAX	494100	17.00	19.81	25.78
ZMAX	494110	15.29	19.81	25.80
ZMAX	494120	18.00	19.81	25.68
ZMAX	494130	17.00	19.81	25.70
ZMAX	494140	14.50	18.07	16.07
ZMAX	494150	15.00	19.81	25.77
ZMAX	494170	18.00	20.23	20.85
ZMAX	494180	17.00	20.16	21.35
ZMAX	494185	17.00	20.22	21.02
ZMAX	494190	17.00	20.20	21.07
ZMAX	494200	15.00	19.81	25.78
ZMAX	494205	17.00	19.81	25.78
ZMAX	494210	14.87	20.16	21.35
ZMAX	494220	15.75	20.16	21.35
ZMAX	494230	16.00	20.16	21.35
ZMAX	494240	15.71	20.17	21.35
ZMAX	494250	16.70	20.18	21.33
ZMAX	495010	20.00	23.23	12.52
ZMAX	495020	15.50	19.33	27.42
ZMAX	495030	15.50	19.33	27.43
ZMAX	495035	19.00	21.09	24.97
ZMAX	495038	17.00	18.17	12.78
ZMAX	495040	16.00	18.70	12.88
ZMAX	495045	15.00	15.88	12.68
ZMAX	495050	15.50	18.89	24.92
ZMAX	495055	15.50	16.83	12.57
ZMAX	495060	14.80	15.87	12.70
ZMAX	495065	14.50	16.26	12.57
ZMAX	495070	11.50	14.02	21.28
ZMAX	495075	11.50	13.63	25.02
ZMAX	495080	13.18	14.02	21.30
ZMAX	495085	13.00	15.04	17.12
ZMAX	495090	11.42	13.64	24.88
ZMAX	495100	15.00	18.08	17.95
ZMAX	495110	14.50	17.09	12.50
ZMAX	495120	13.00	14.23	12.92
ZMAX	495125	14.42	16.08	13.40
ZMAX	495140	14.50	16.81	26.47
ZMAX	495145	14.50	16.81	26.47
ZMAX	495150	13.00	14.24	12.92
ZMAX	495152	12.50	16.09	25.52
ZMAX	495154	12.50	16.02	19.38
ZMAX	495155	12.50	16.02	19.38
ZMAX	495156	12.50	13.50	0.00
ZMAX	495160	12.50	16.03	24.87
ZMAX	495162	13.50	15.57	25.52
ZMAX	495165	13.50	16.01	17.57
ZMAX	495170	12.50	15.75	13.55
ZMAX	495180	10.45	12.94	25.10
ZMAX	495210	12.50	14.68	25.08
ZMAX	495215	12.50	14.23	12.93
ZMAX	495230	8.82	12.33	13.10
ZMAX	495235	10.50	13.88	24.82
ZMAX	495240	8.50	11.27	25.58
ZMAX	495260	13.00	16.05	24.57
ZMAX	495270	12.50	14.22	12.93
ZMAX	495275	11.50	13.22	12.92
ZMAX	495280	10.90	11.28	25.48
ZMAX	495300	13.94	15.70	13.52

ALTERNATIVE 3 25-YEAR 24-HOUR

ZMAX	495302	13.90	15.66	13.48
ZMAX	495304	13.31	15.59	13.22
ZMAX	495306	12.73	14.38	13.83
ZMAX	495308	12.18	14.26	14.15
ZMAX	495310	11.49	13.64	24.97
ZMAX	495312	10.92	13.64	24.98
ZMAX	495314	10.43	13.64	24.98
ZMAX	495316	11.80	14.15	12.53
ZMAX	495320	9.75	13.64	25.00
ZMAX	495322	9.64	14.75	18.42
ZMAX	495324	9.44	14.51	18.78
ZMAX	495326	9.30	14.13	20.27
ZMAX	495328	9.43	14.02	21.27
ZMAX	495330	9.20	14.02	21.28
ZMAX	495332	9.02	14.02	21.23
ZMAX	495334	8.90	13.83	24.47
ZMAX	495336	8.72	13.64	24.98
ZMAX	495338	8.53	13.63	25.02
ZMAX	495340	8.40	13.62	25.00
ZMAX	495342	8.23	13.60	25.00
ZMAX	495344	8.04	13.45	25.03
ZMAX	495346	7.85	13.31	24.93
ZMAX	495348	7.66	12.94	25.10
ZMAX	495350	7.47	11.64	25.38
ZMAX	495352	7.34	11.29	25.57
ZMAX	495354	7.26	11.28	25.55
ZMAX	495356	7.19	11.22	25.60
ZMAX	496010	14.50	16.21	0.10
ZMAX	496020	14.50	18.80	0.00
ZMAX	496030	14.50	16.31	0.02
ZMAX	496060	16.60	16.77	12.83
ZMAX	496065	14.00	16.25	0.08
ZMAX	496070	14.00	16.22	0.10
ZMAX	496080	14.20	18.00	0.00
ZMAX	496090	14.00	18.00	0.00
ZMAX	496100	12.50	15.90	0.07
ZMAX	496110	11.00	15.42	13.92
ZMAX	496120	13.00	15.31	13.30
ZMAX	496125	12.00	14.36	19.25
ZMAX	496130	13.00	15.36	13.77
ZMAX	496150	14.00	15.40	13.92
ZMAX	496160	11.00	14.36	19.25
ZMAX	496170	12.00	15.41	13.93
ZMAX	496175	12.00	14.85	12.57
ZMAX	496180	11.00	13.26	13.02
ZMAX	496190	11.00	13.25	13.02
ZMAX	496200	10.50	11.30	13.93
ZMAX	496232	16.00	18.00	0.00
ZMAX	496234	14.00	16.36	0.15
ZMAX	496235	15.00	15.39	0.12
ZMAX	496240	14.28	15.82	0.03
ZMAX	496245	13.50	15.15	0.13
ZMAX	496260	13.50	15.02	0.30
ZMAX	496270	12.50	13.69	12.98
ZMAX	496280	9.50	12.13	13.62
ZMAX	496310	10.50	11.36	13.63
ZMAX	496320	10.50	11.24	13.67
ZMAX	496340	4.43	10.33	14.12
ZMAX	496350	8.50	10.59	25.02
ZMAX	496360	7.50	9.08	13.68
ZMAX	496370	6.50	8.40	13.95
ZMAX	496380	5.50	8.28	14.87
ZMAX	496390	4.41	8.34	14.80
ZMAX	496395	4.50	8.12	14.98
ZMAX	496400	6.50	8.28	14.83
ZMAX	496410	-0.65	8.12	14.97
ZMAX	496420	3.50	7.21	16.18

ALTERNATIVE 3 25-YEAR 24-HOUR

ZMAX	496430	5.50	9.18	12.98
ZMAX	496440	5.50	8.08	13.80
ZMAX	496450	3.50	8.07	13.80
ZMAX	496460	5.50	10.10	14.18
ZMAX	496470	3.00	7.62	16.90
ZMAX	496480	6.50	10.06	15.08
ZMAX	496485	7.50	11.00	16.52
ZMAX	496490	3.50	9.02	20.33
ZMAX	496500	6.50	11.00	0.00
ZMAX	496510	4.50	8.50	240.00
ZMAX	496515	4.50	8.04	13.15
ZMAX	496520	5.50	7.62	16.92
ZMAX	496530	5.50	7.62	16.92
ZMAX	496540	6.50	7.62	16.90
ZMAX	496545	4.00	7.62	16.90
ZMAX	496550	4.00	7.62	16.90
ZMAX	496560	3.00	7.62	16.90
ZMAX	496570	5.50	7.62	16.92
ZMAX	496580	7.50	11.01	13.97
ZMAX	496590	4.50	8.12	14.98
ZMAX	496600	-1.88	7.61	16.83
ZMAX	496610	4.50	7.26	13.10
ZMAX	496620	4.50	7.24	13.10
ZMAX	497010	11.00	13.93	13.30
ZMAX	497020	3.50	10.93	25.83
ZMAX	497025	8.50	11.15	12.73
ZMAX	497035	6.50	10.48	13.15
ZMAX	497045	4.50	8.01	13.30
ZMAX	497050	3.50	8.00	13.30
ZMAX	497055	3.50	6.73	12.67
ZMAX	497065	1.88	6.12	14.70
ZMAX	497070	8.50	10.07	12.88
ZMAX	497080	2.06	6.03	12.95
ZMAX	497085	6.50	10.69	26.00
ZMAX	497086	6.32	11.21	25.62
ZMAX	497088	5.89	10.93	25.83
ZMAX	497090	4.32	10.82	26.00
ZMAX	497092	3.75	10.58	26.00
ZMAX	497094	2.75	10.16	26.00
ZMAX	497096	2.30	9.23	26.00
ZMAX	497098	1.85	8.92	26.00
ZMAX	497100	-0.16	7.79	25.55
ZMAX	497102	-1.57	7.39	25.47
ZMAX	497104	-2.19	7.13	25.40
ZMAX	497105	-1.00	7.10	25.40
ZMAX	497106	-1.37	5.58	17.03
ZMAX	497107	-2.07	5.55	17.07
ZMAX	497108	-0.37	5.53	17.00
ZMAX	497109	-4.75	5.63	17.03
ZMAX	497111	-3.66	5.58	17.03
ZMAX	497112	-3.66	5.71	17.02
ZMAX	497113	-5.33	6.27	17.00
ZMAX	497110	-0.19	7.67	15.97
ZMAX	497120	1.50	5.56	17.08
ZMAX	497122	4.50	5.56	17.08
ZMAX	497124	4.00	5.57	17.08
ZMAX	497130	-0.21	7.32	15.18
ZMAX	497140	4.00	6.50	0.00
ZMAX	497150	5.40	6.91	12.50
ZMAX	497160	-1.85	7.20	16.28
ZMAX	497161	-2.25	6.78	16.43
ZMAX	497162	-2.86	6.07	16.70
ZMAX	497170	-6.19	3.68	17.02
ZMAX	500010	6.94	11.25	12.75
ZMAX	500020	8.41	10.31	14.28
ZMAX	500025	6.13	11.05	12.97
ZMAX	500030	5.77	11.04	12.97

ALTERNATIVE 3 25-YEAR 24-HOUR

ZMAX	500040	5.07	10.55	13.05
ZMAX	500050	4.00	9.24	25.90
ZMAX	500110	7.43	11.26	12.82
ZMAX	500120	6.16	10.82	26.13
ZMAX	500130	8.00	11.90	13.58
ZMAX	500140	6.39	10.82	26.52
ZMAX	500210	4.00	10.82	26.67
ZMAX	500220	6.91	11.27	12.73
ZMAX	500300	5.00	10.08	12.68
ZMAX	9498000	-6.69	2.96	0.00
ZMAX	9496630	12.00	12.00	0.00
ZMAX	9493020	20.00	20.00	0.00
ZMAX	9493060	22.50	22.50	0.00
ZMAX	9493190	19.00	19.00	0.00
ZMAX	9493140	19.98	19.98	0.00
ZMAX	9493150	19.70	19.70	0.00
ZMAX	9493240	19.00	19.00	0.00
ZMAX	9495030	17.48	17.48	0.00
ZMAX	9495010	23.20	23.20	0.00
ZMAX	9495085	15.10	15.10	0.00
ZMAX	9495140	16.00	16.00	0.00
ZMAX	9495145	16.00	16.00	0.00
ZMAX	9495160	15.50	15.50	0.00
ZMAX	9496320	11.00	11.00	0.00
ZMAX	9496260	14.00	14.00	0.00
ZMAX	9494250	18.00	18.00	0.00
ZMAX	9494190	18.50	18.50	0.00
ZMAX	100043	99.00	99.00	0.00
ZMAX	100044	99.00	99.00	0.00
ZMAX	100045	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100047	99.00	99.00	0.00
ZMAX	100048	99.00	99.00	0.00
ZMAX	100049	99.00	99.00	0.00
ZMAX	100050	99.00	99.00	0.00
ZMAX	100051	99.00	99.00	0.00
ZMAX	100052	99.00	99.00	0.00
ZMAX	100053	99.00	99.00	0.00
ZMAX	100054	99.00	99.00	0.00
ZMAX	100055	99.00	99.00	0.00
ZMAX	100056	99.00	99.00	0.00
ZMAX	100057	99.00	99.00	0.00
ZMAX	100058	99.00	99.00	0.00
ZMAX	100059	99.00	99.00	0.00
ZMAX	100060	99.00	99.00	0.00
ZMAX	100061	99.00	99.00	0.00
ZMAX	100062	99.00	99.00	0.00
ZMAX	100063	99.00	99.00	0.00
ZMAX	100064	99.00	99.00	0.00
ZMAX	100065	99.00	99.00	0.00
ZMAX	100066	99.00	99.00	0.00
ZMAX	100067	99.00	99.00	0.00
ZMAX	100068	99.00	99.00	0.00
ZMAX	100069	99.00	99.00	0.00
ZMAX	100070	99.00	99.00	0.00
ZMAX	100071	99.00	99.00	0.00
ZMAX	100072	99.00	99.00	0.00
ZMAX	100073	99.00	99.00	0.00
ZMAX	100074	99.00	99.00	0.00
ZMAX	100075	99.00	99.00	0.00
ZMAX	100076	99.00	99.00	0.00
ZMAX	100077	99.00	99.00	0.00
ZMAX	100078	99.00	99.00	0.00
ZMAX	100079	99.00	99.00	0.00
ZMAX	100080	99.00	99.00	0.00
ZMAX	100081	99.00	99.00	0.00

ALTERNATIVE 3 25-YEAR 24-HOUR

ZMAX	100082	99.00	99.00	0.00
ZMAX	100083	99.00	99.00	0.00
ZMAX	100084	99.00	99.00	0.00
ZMAX	100085	99.00	99.00	0.00
ZMAX	100086	99.00	99.00	0.00
ZMAX	100087	99.00	99.00	0.00
ZMAX	100088	99.00	99.00	0.00
ZMAX	100089	99.00	99.00	0.00
ZMAX	494151	15.00	17.00	0.00
ZMAX	494111	15.29	17.71	25.77
ZMAX	493341	16.33	18.60	0.00
ZMAX	493481	15.51	16.63	25.73
ZMAX	494211	14.87	20.19	0.00
ZMAX	494221	15.75	18.37	21.35
ZMAX	494231	16.04	19.66	21.35
ZMAX	494241	15.77	19.53	21.35

Alternative 4 Diversion Channel

ALTERNATIVE 4 5-YEAR 24-HOUR

	JUNC ID	INVT	Z_MAX	T_MAX
ZMAX	490000	24.23	26.46	0.00
ZMAX	490004	26.46	27.84	25.85
ZMAX	490002	20.93	26.14	29.05
ZMAX	490008	27.00	28.09	29.87
ZMAX	490010	26.16	28.19	39.67
ZMAX	490020	24.36	28.20	26.73
ZMAX	490030	26.46	28.14	25.25
ZMAX	490040	29.00	29.90	26.57
ZMAX	490050	25.16	28.39	15.43
ZMAX	490070	25.96	29.13	26.62
ZMAX	490071	29.00	29.91	14.60
ZMAX	490072	27.00	28.02	27.30
ZMAX	490073	30.00	32.31	14.45
ZMAX	490080	27.66	29.13	27.27
ZMAX	490090	28.00	30.71	27.40
ZMAX	490100	29.00	29.69	14.10
ZMAX	490110	26.16	29.70	25.18
ZMAX	490120	30.64	33.01	69.33
ZMAX	490130	28.96	33.02	69.30
ZMAX	490140	29.26	31.53	240.00
ZMAX	490141	31.00	32.13	26.37
ZMAX	490150	29.89	33.27	67.15
ZMAX	490160	29.77	34.52	59.60
ZMAX	490170	35.00	38.56	26.23
ZMAX	490180	32.66	37.49	26.72
ZMAX	490181	33.75	37.49	26.82
ZMAX	490200	36.66	38.56	26.23
ZMAX	490210	36.29	38.35	0.00
ZMAX	490211	39.00	40.60	17.20
ZMAX	490220	40.04	42.02	15.35
ZMAX	490221	42.00	44.50	30.53
ZMAX	490230	39.95	40.97	25.65
ZMAX	490240	26.36	30.28	24.42
ZMAX	490250	29.00	32.36	21.48
ZMAX	490251	33.00	34.78	29.83
ZMAX	490260	31.16	33.28	16.17
ZMAX	490261	34.00	36.08	13.83
ZMAX	490263	34.00	35.25	28.05
ZMAX	490264	33.00	34.83	24.37
ZMAX	490266	34.00	35.80	16.42
ZMAX	490270	35.00	37.74	14.40
ZMAX	490280	32.70	34.78	29.83
ZMAX	490281	32.70	34.78	29.75
ZMAX	490290	31.00	34.39	16.30
ZMAX	490300	31.86	33.17	13.50
ZMAX	490310	33.00	36.26	18.32
ZMAX	490320	34.00	37.76	20.60
ZMAX	490321	36.00	38.24	37.90
ZMAX	490330	37.00	38.66	27.77
ZMAX	490340	35.00	37.83	14.20
ZMAX	490350	36.00	38.67	25.85
ZMAX	490370	33.96	35.92	25.73
ZMAX	490375	35.00	38.08	57.17
ZMAX	490390	34.56	37.97	24.93
ZMAX	490391	36.80	37.26	26.05
ZMAX	490392	36.40	36.82	15.00
ZMAX	490400	37.00	38.89	25.85
ZMAX	490401	37.00	39.37	25.98
ZMAX	490410	35.46	38.08	57.08
ZMAX	490411	36.00	38.08	57.10
ZMAX	490420	35.00	40.20	50.95
ZMAX	490421	39.00	39.74	28.53
ZMAX	490422	39.00	41.05	25.17
ZMAX	490425	38.00	40.20	51.63
ZMAX	490430	35.47	40.69	26.00
ZMAX	490440	40.00	42.84	26.75

ALTERNATIVE 4 5-YEAR 24-HOUR

ZMAX	490450	39.00	40.58	57.92
ZMAX	490451	39.00	40.14	29.65
ZMAX	490453	39.00	40.14	31.75
ZMAX	490455	39.00	40.60	21.83
ZMAX	490460	43.00	45.73	27.53
ZMAX	490470	40.00	41.74	25.50
ZMAX	490480	39.67	42.00	0.00
ZMAX	490490	40.38	42.30	19.83
ZMAX	490500	41.00	44.61	59.72
ZMAX	490510	49.00	50.73	17.83
ZMAX	490520	43.47	48.11	27.60
ZMAX	490530	51.00	54.16	83.12
ZMAX	490535	56.47	57.94	16.12
ZMAX	490540	56.00	58.17	16.05
ZMAX	490550	48.00	49.28	17.52
ZMAX	490555	48.07	51.02	13.92
ZMAX	490560	49.00	49.74	16.27
ZMAX	490580	35.47	40.81	25.98
ZMAX	490590	48.37	49.31	26.27
ZMAX	490600	42.54	44.45	25.78
ZMAX	490610	39.77	41.38	27.08
ZMAX	490612	42.00	44.20	27.75
ZMAX	490620	41.70	42.88	16.80
ZMAX	490621	44.00	45.18	27.30
ZMAX	490630	42.17	44.53	20.53
ZMAX	490637	41.53	42.43	14.78
ZMAX	490638	44.12	44.50	24.82
ZMAX	490639	48.72	49.21	14.53
ZMAX	490640	37.57	40.86	25.35
ZMAX	490641	44.00	46.73	24.48
ZMAX	490642	45.16	47.24	16.32
ZMAX	490643	39.87	44.93	16.70
ZMAX	490644	47.67	49.21	14.60
ZMAX	490645	48.67	51.27	24.60
ZMAX	490646	41.53	47.31	14.48
ZMAX	490650	43.27	45.09	19.27
ZMAX	490651	48.16	50.18	16.65
ZMAX	490652	43.47	46.22	13.98
ZMAX	490654	46.00	48.13	26.82
ZMAX	490655	46.55	48.83	14.98
ZMAX	490659	45.57	48.11	14.32
ZMAX	490660	39.87	46.11	14.37
ZMAX	490661	45.57	49.72	16.63
ZMAX	490670	45.37	48.30	14.27
ZMAX	490675	41.87	48.11	14.30
ZMAX	490680	47.11	49.55	16.67
ZMAX	490690	45.49	48.39	14.18
ZMAX	490700	53.74	58.68	29.58
ZMAX	490710	47.96	52.09	27.78
ZMAX	490711	52.00	54.43	21.28
ZMAX	490720	50.00	52.14	27.97
ZMAX	490730	50.23	52.56	25.45
ZMAX	490740	49.64	53.25	17.57
ZMAX	490742	58.00	59.32	14.05
ZMAX	490743	48.76	53.27	18.00
ZMAX	490744	49.87	53.27	18.00
ZMAX	490745	57.00	59.15	29.72
ZMAX	490746	57.00	59.23	26.50
ZMAX	490750	51.30	53.51	16.03
ZMAX	490751	55.00	56.23	25.60
ZMAX	490760	50.95	53.93	20.07
ZMAX	490770	51.91	55.20	27.10
ZMAX	490771	55.00	56.06	25.68
ZMAX	490772	56.00	57.26	26.22
ZMAX	490773	56.00	58.54	25.82
ZMAX	490776	56.00	57.12	27.18
ZMAX	490779	55.00	57.10	24.95

ALTERNATIVE 4 5-YEAR 24-HOUR

ZMAX	490780	54.21	57.06	20.42
ZMAX	490790	53.17	55.16	41.82
ZMAX	490791	56.00	57.79	27.22
ZMAX	490792	56.00	57.63	26.03
ZMAX	490794	56.00	57.24	29.38
ZMAX	490795	56.00	56.98	27.40
ZMAX	490800	53.17	55.62	14.60
ZMAX	490801	55.00	57.11	25.08
ZMAX	490802	56.00	57.35	25.72
ZMAX	490803	57.00	57.89	28.22
ZMAX	490804	56.00	57.89	27.72
ZMAX	490900	53.67	55.16	41.88
ZMAX	491010	22.06	24.94	14.25
ZMAX	491019	26.44	27.43	17.70
ZMAX	491020	26.14	28.53	16.78
ZMAX	491021	26.00	28.54	17.08
ZMAX	491022	27.07	28.53	16.93
ZMAX	491040	23.16	25.04	14.20
ZMAX	491041	26.86	29.01	13.92
ZMAX	491042	27.66	28.61	16.12
ZMAX	491043	27.17	28.39	16.33
ZMAX	491044	27.66	28.94	13.97
ZMAX	491060	25.96	28.98	116.38
ZMAX	491080	25.66	29.01	116.38
ZMAX	491100	28.96	30.31	96.63
ZMAX	491102	29.00	31.08	13.28
ZMAX	491120	27.86	30.30	78.73
ZMAX	491121	29.25	32.22	42.45
ZMAX	491122	32.00	33.30	13.50
ZMAX	491123	32.00	33.51	17.65
ZMAX	491140	29.62	32.27	42.22
ZMAX	491160	30.66	32.57	17.13
ZMAX	491180	32.00	34.31	25.73
ZMAX	491200	34.46	36.56	14.65
ZMAX	491220	36.97	38.07	19.53
ZMAX	491221	33.05	36.27	14.00
ZMAX	491222	36.80	38.34	13.12
ZMAX	491223	34.39	36.28	13.98
ZMAX	491240	31.00	32.45	27.82
ZMAX	491260	29.00	31.14	86.48
ZMAX	491280	29.00	31.31	84.15
ZMAX	491285	30.77	38.29	14.47
ZMAX	491300	29.00	31.31	84.15
ZMAX	491302	33.00	36.22	18.52
ZMAX	491320	32.90	36.23	14.03
ZMAX	491340	29.17	31.70	35.60
ZMAX	491344	36.00	37.90	27.73
ZMAX	491342	31.36	34.00	14.92
ZMAX	491360	33.97	36.54	16.25
ZMAX	491380	31.36	35.21	17.23
ZMAX	491382	33.00	33.42	14.47
ZMAX	491384	30.00	32.09	26.75
ZMAX	491387	34.17	38.94	50.08
ZMAX	491388	34.17	40.79	26.65
ZMAX	491390	36.63	38.94	49.30
ZMAX	491391	35.17	38.97	49.23
ZMAX	491393	42.00	44.71	19.67
ZMAX	491394	36.67	40.02	17.42
ZMAX	491395	35.27	38.97	49.23
ZMAX	491396	38.00	40.30	27.32
ZMAX	491397	32.07	38.93	50.07
ZMAX	491398	42.00	44.02	41.60
ZMAX	491399	38.00	40.79	26.65
ZMAX	491400	33.27	35.12	13.50
ZMAX	491401	36.77	42.20	14.83
ZMAX	491402	32.17	38.94	49.25
ZMAX	491404	38.96	40.79	27.17

ALTERNATIVE 4 5-YEAR 24-HOUR

ZMAX	491406	36.77	40.02	17.38
ZMAX	491407	32.17	38.93	50.32
ZMAX	491392	43.00	47.25	27.48
ZMAX	491403	45.00	48.01	29.82
ZMAX	491440	38.17	39.66	27.67
ZMAX	491441	38.54	39.66	27.65
ZMAX	491460	30.71	35.80	24.70
ZMAX	491465	31.27	35.83	25.22
ZMAX	491480	33.87	36.50	13.55
ZMAX	491500	30.00	35.85	26.38
ZMAX	491501	31.17	35.84	26.03
ZMAX	491502	36.00	37.76	27.88
ZMAX	491520	38.15	40.01	13.38
ZMAX	491540	41.00	43.84	27.87
ZMAX	491541	42.00	45.46	27.55
ZMAX	491452	42.00	43.55	26.18
ZMAX	491453	37.18	39.41	13.48
ZMAX	491560	41.00	41.59	28.95
ZMAX	491561	38.00	41.35	29.92
ZMAX	491562	44.00	44.85	31.13
ZMAX	491563	39.00	41.35	29.92
ZMAX	491580	36.55	37.57	28.97
ZMAX	491600	39.73	41.37	240.00
ZMAX	491620	45.57	46.63	28.27
ZMAX	491621	48.00	50.20	27.60
ZMAX	490232	44.00	46.41	16.42
ZMAX	490431	41.00	44.07	26.53
ZMAX	490449	41.00	43.29	17.73
ZMAX	490457	39.00	40.61	22.20
ZMAX	490491	47.00	48.42	29.25
ZMAX	490492	47.00	50.25	29.27
ZMAX	490501	46.00	48.82	14.10
ZMAX	490511	48.00	49.65	28.08
ZMAX	490561	57.00	58.11	27.78
ZMAX	490581	44.00	45.94	15.03
ZMAX	490582	50.00	51.82	18.60
ZMAX	490584	50.00	51.51	26.03
ZMAX	490587	53.00	56.61	16.95
ZMAX	490701	54.00	58.55	20.10
ZMAX	490702	57.00	60.42	25.63
ZMAX	490703	53.74	55.00	14.12
ZMAX	490704	56.00	60.39	14.15
ZMAX	490713	52.00	53.82	29.12
ZMAX	490741	58.00	58.74	28.33
ZMAX	490762	56.00	58.18	27.28
ZMAX	490781	58.00	61.75	17.97
ZMAX	491274	31.22	38.40	14.72
ZMAX	491284	33.92	36.06	14.38
ZMAX	491389	39.00	40.35	27.20
ZMAX	491700	23.00	26.12	24.52
ZMAX	491701	9.70	24.05	37.10
ZMAX	491702	55.00	56.74	35.83
ZMAX	491703	25.00	27.31	18.43
ZMAX	491704	56.00	58.66	16.53
ZMAX	491705	55.80	56.74	35.83
ZMAX	491706	48.90	51.25	27.72
ZMAX	491707	45.00	46.40	30.12
ZMAX	491708	36.00	38.27	28.08
ZMAX	491709	37.00	39.09	16.23
ZMAX	491710	27.00	28.65	16.65
ZMAX	491711	24.00	25.42	40.30
ZMAX	491712	30.33	33.33	29.95
ZMAX	491713	30.00	33.34	30.13
ZMAX	491714	31.00	32.02	21.07
ZMAX	491715	40.17	41.74	25.38
ZMAX	491716	30.00	34.36	28.57
ZMAX	491717	52.00	55.10	26.70

ALTERNATIVE 4 5-YEAR 24-HOUR

ZMAX	491718	34.00	36.29	15.75
ZMAX	491719	42.00	45.70	28.52
ZMAX	491720	38.00	40.31	16.47
ZMAX	491721	38.00	39.98	25.93
ZMAX	491722	39.00	39.57	16.95
ZMAX	491723	29.00	37.08	39.95
ZMAX	491724	29.00	34.36	28.88
ZMAX	491725	33.00	33.95	16.62
ZMAX	491728	30.00	34.61	27.77
ZMAX	491729	27.00	30.19	27.33
ZMAX	491730	26.00	29.17	22.00
ZMAX	491737	38.00	38.53	16.62
ZMAX	491740	37.00	38.49	16.32
ZMAX	491745	37.00	38.92	21.35
ZMAX	491746	37.00	38.72	28.12
ZMAX	491750	44.00	45.43	27.72
ZMAX	491753	49.00	50.77	29.85
ZMAX	490574	41.77	45.22	15.65
ZMAX	491405	42.00	44.34	28.37
ZMAX	490714	52.00	54.09	17.12
ZMAX	490753	51.00	53.78	28.50
ZMAX	491224	39.00	41.41	28.83
ZMAX	491225	41.50	43.41	14.97
ZMAX	491759	39.00	40.31	21.92
ZMAX	491760	39.00	40.27	22.13
ZMAX	491764	38.00	40.00	20.45
ZMAX	491768	38.00	39.63	22.73
ZMAX	499999	35.85	39.59	22.73
ZMAX	499998	35.80	39.58	22.75
ZMAX	499997	35.00	35.80	22.75
ZMAX	491002	30.84	33.34	30.13
ZMAX	491001	28.00	33.34	30.97
ZMAX	100000	99.00	99.00	0.00
ZMAX	100001	99.00	99.00	0.00
ZMAX	100002	99.00	99.00	0.00
ZMAX	100003	99.00	99.00	0.00
ZMAX	100004	99.00	99.00	0.00
ZMAX	100005	99.00	99.00	0.00
ZMAX	100006	99.00	99.00	0.00
ZMAX	100007	99.00	99.00	0.00
ZMAX	100008	99.00	99.00	0.00
ZMAX	100009	99.00	99.00	0.00
ZMAX	100010	99.00	99.00	0.00
ZMAX	100011	99.00	99.00	0.00
ZMAX	100012	99.00	99.00	0.00
ZMAX	100013	99.00	99.00	0.00
ZMAX	100014	99.00	99.00	0.00
ZMAX	100015	99.00	99.00	0.00
ZMAX	100016	99.00	99.00	0.00
ZMAX	100017	99.00	99.00	0.00
ZMAX	100018	99.00	99.00	0.00
ZMAX	100019	99.00	99.00	0.00
ZMAX	100020	99.00	99.00	0.00
ZMAX	100021	99.00	99.00	0.00
ZMAX	100022	99.00	99.00	0.00
ZMAX	100023	99.00	99.00	0.00
ZMAX	100024	99.00	99.00	0.00
ZMAX	100025	99.00	99.00	0.00
ZMAX	100026	99.00	99.00	0.00
ZMAX	100027	99.00	99.00	0.00
ZMAX	100028	99.00	99.00	0.00
ZMAX	100029	99.00	99.00	0.00
ZMAX	100030	99.00	99.00	0.00
ZMAX	100031	99.00	99.00	0.00
ZMAX	100032	99.00	99.00	0.00
ZMAX	100033	99.00	99.00	0.00
ZMAX	100034	99.00	99.00	0.00

ALTERNATIVE 4 5-YEAR 24-HOUR

ZMAX	100035	99.00	99.00	0.00
ZMAX	100036	99.00	99.00	0.00
ZMAX	100037	99.00	99.00	0.00
ZMAX	100038	99.00	99.00	0.00
ZMAX	100039	99.00	99.00	0.00
ZMAX	100040	99.00	99.00	0.00
ZMAX	493010	17.00	22.66	25.45
ZMAX	493020	20.00	22.62	27.23
ZMAX	493030	18.00	24.41	13.30
ZMAX	493040	17.00	22.11	21.47
ZMAX	493060	21.00	21.45	13.35
ZMAX	493070	19.00	25.64	13.65
ZMAX	493090	18.00	22.29	25.08
ZMAX	493100	20.00	21.11	12.67
ZMAX	493110	18.00	19.93	12.95
ZMAX	493120	18.00	19.99	0.00
ZMAX	493130	17.00	20.08	13.00
ZMAX	493140	16.00	18.43	13.70
ZMAX	493150	16.00	19.33	13.83
ZMAX	493180	18.00	24.08	14.90
ZMAX	493185	19.00	23.23	18.43
ZMAX	493190	17.00	19.21	13.03
ZMAX	493195	17.00	20.06	13.65
ZMAX	493200	18.00	19.65	14.00
ZMAX	493210	18.00	19.18	13.03
ZMAX	493215	19.00	20.75	25.27
ZMAX	493220	16.00	18.96	13.32
ZMAX	493230	15.50	18.43	13.70
ZMAX	493240	16.00	19.06	14.82
ZMAX	493250	17.00	24.08	14.90
ZMAX	493260	21.00	24.08	14.97
ZMAX	493270	19.00	24.07	14.97
ZMAX	493280	19.00	23.06	13.03
ZMAX	493290	19.00	22.23	15.38
ZMAX	493310	17.00	21.71	29.13
ZMAX	493320	17.00	19.80	0.00
ZMAX	493330	17.00	19.64	14.03
ZMAX	493340	16.33	19.63	14.00
ZMAX	493350	15.50	17.69	13.17
ZMAX	493360	13.00	18.00	0.00
ZMAX	493370	14.61	17.75	13.97
ZMAX	493380	14.50	17.12	16.90
ZMAX	493390	14.50	17.86	13.77
ZMAX	493400	13.50	17.12	16.88
ZMAX	493410	12.50	17.12	16.88
ZMAX	493420	13.50	16.28	0.03
ZMAX	493430	12.44	15.94	0.07
ZMAX	493440	15.50	18.71	28.10
ZMAX	493450	18.00	18.81	15.13
ZMAX	493470	16.00	18.81	15.15
ZMAX	493480	15.50	18.81	15.15
ZMAX	493500	12.27	16.28	14.28
ZMAX	493505	12.27	14.63	16.15
ZMAX	493520	11.76	14.20	17.43
ZMAX	493525	11.00	14.17	17.52
ZMAX	493530	14.50	17.13	16.60
ZMAX	493535	15.00	17.13	16.60
ZMAX	493540	13.50	15.99	0.00
ZMAX	493545	9.65	14.16	17.52
ZMAX	493550	14.50	15.20	12.70
ZMAX	493555	13.50	14.81	12.50
ZMAX	494010	24.80	26.00	0.00
ZMAX	494020	22.90	25.55	12.93
ZMAX	494025	20.00	21.16	12.95
ZMAX	494030	22.00	22.69	13.00
ZMAX	494040	19.00	20.45	13.07
ZMAX	494045	18.70	20.44	13.07

ALTERNATIVE 4 5-YEAR 24-HOUR

ZMAX	494050	20.00	25.00	0.00
ZMAX	494060	25.00	26.00	0.00
ZMAX	494070	18.00	19.71	13.70
ZMAX	494072	19.00	22.01	24.17
ZMAX	494074	20.00	21.05	13.12
ZMAX	494076	19.00	21.05	12.68
ZMAX	494078	21.00	22.12	12.85
ZMAX	494080	18.00	20.11	13.10
ZMAX	494100	17.00	19.06	15.18
ZMAX	494110	15.29	18.60	17.27
ZMAX	494120	18.00	19.22	13.35
ZMAX	494130	17.00	18.62	17.20
ZMAX	494140	14.50	17.72	16.00
ZMAX	494150	15.00	18.61	17.23
ZMAX	494170	18.00	19.72	13.67
ZMAX	494180	17.00	19.60	15.65
ZMAX	494185	17.00	19.56	13.80
ZMAX	494190	17.00	18.58	13.85
ZMAX	494200	15.00	18.92	34.78
ZMAX	494205	17.00	18.99	15.12
ZMAX	494210	14.87	18.80	0.00
ZMAX	494220	15.75	18.32	0.03
ZMAX	494230	16.00	18.26	0.08
ZMAX	494240	15.71	19.04	14.45
ZMAX	494250	16.70	18.42	13.85
ZMAX	495010	20.00	23.20	0.00
ZMAX	495020	15.50	18.71	28.10
ZMAX	495030	15.50	18.71	28.10
ZMAX	495035	19.00	20.34	24.98
ZMAX	495038	17.00	18.10	12.90
ZMAX	495040	16.00	18.63	12.92
ZMAX	495045	15.00	15.77	12.73
ZMAX	495050	15.50	18.34	24.92
ZMAX	495055	15.50	16.79	12.95
ZMAX	495060	14.80	15.76	12.73
ZMAX	495065	14.50	16.15	13.05
ZMAX	495070	11.50	12.83	13.25
ZMAX	495075	11.50	12.50	0.00
ZMAX	495080	13.18	13.99	0.00
ZMAX	495085	13.00	15.02	20.35
ZMAX	495090	11.42	12.99	14.20
ZMAX	495100	15.00	17.67	17.47
ZMAX	495110	14.50	17.04	12.75
ZMAX	495120	13.00	14.12	13.35
ZMAX	495125	14.42	15.96	14.05
ZMAX	495140	14.50	16.55	17.73
ZMAX	495145	14.50	16.39	240.00
ZMAX	495150	13.00	14.12	13.35
ZMAX	495152	12.50	15.08	25.55
ZMAX	495154	12.50	15.43	25.97
ZMAX	495155	12.50	15.43	25.97
ZMAX	495156	12.50	13.49	0.00
ZMAX	495160	12.50	15.34	25.58
ZMAX	495162	13.50	14.84	25.57
ZMAX	495165	13.50	15.49	25.70
ZMAX	495170	12.50	15.70	24.82
ZMAX	495180	10.45	12.41	0.00
ZMAX	495210	12.50	13.90	25.12
ZMAX	495215	12.50	14.12	13.35
ZMAX	495230	8.82	11.69	13.03
ZMAX	495235	10.50	13.33	24.80
ZMAX	495240	8.50	10.21	25.12
ZMAX	495260	13.00	15.50	23.82
ZMAX	495270	12.50	14.11	13.35
ZMAX	495275	11.50	13.10	13.50
ZMAX	495280	10.90	11.14	13.52
ZMAX	495300	13.94	15.46	14.27

ALTERNATIVE 4 5-YEAR 24-HOUR

ZMAX	495302	13.90	15.40	14.28
ZMAX	495304	13.31	15.27	13.30
ZMAX	495306	12.73	14.10	14.53
ZMAX	495308	12.18	14.02	14.82
ZMAX	495310	11.49	12.95	13.55
ZMAX	495312	10.92	12.93	13.43
ZMAX	495314	10.43	12.43	24.40
ZMAX	495316	11.80	14.11	12.53
ZMAX	495320	9.75	12.43	24.42
ZMAX	495322	9.64	13.28	17.88
ZMAX	495324	9.44	13.13	18.03
ZMAX	495326	9.30	12.77	18.95
ZMAX	495328	9.43	12.82	13.48
ZMAX	495330	9.20	12.83	13.25
ZMAX	495332	9.02	12.69	20.93
ZMAX	495334	8.90	12.56	22.75
ZMAX	495336	8.72	12.42	24.38
ZMAX	495338	8.53	12.42	24.43
ZMAX	495340	8.40	12.42	24.42
ZMAX	495342	8.23	12.41	24.52
ZMAX	495344	8.04	12.30	24.73
ZMAX	495346	7.85	12.00	24.63
ZMAX	495348	7.66	11.80	24.75
ZMAX	495350	7.47	10.56	24.95
ZMAX	495352	7.34	10.22	25.10
ZMAX	495354	7.26	10.22	25.03
ZMAX	495356	7.19	10.19	25.13
ZMAX	496010	14.50	16.20	0.10
ZMAX	496020	14.50	18.79	0.00
ZMAX	496030	14.50	16.31	0.02
ZMAX	496060	16.60	16.75	12.83
ZMAX	496065	14.00	16.25	0.08
ZMAX	496070	14.00	16.22	0.10
ZMAX	496080	14.20	17.99	0.00
ZMAX	496090	14.00	17.99	0.00
ZMAX	496100	12.50	15.90	0.07
ZMAX	496110	11.00	15.37	0.72
ZMAX	496120	13.00	15.09	14.60
ZMAX	496125	12.00	13.64	17.40
ZMAX	496130	13.00	15.27	1.15
ZMAX	496150	14.00	15.34	0.77
ZMAX	496160	11.00	13.64	17.40
ZMAX	496170	12.00	15.36	0.73
ZMAX	496175	12.00	14.83	12.55
ZMAX	496180	11.00	13.14	13.55
ZMAX	496190	11.00	13.14	13.57
ZMAX	496200	10.50	11.24	0.73
ZMAX	496232	16.00	18.00	0.00
ZMAX	496234	14.00	16.36	0.15
ZMAX	496235	15.00	15.40	0.12
ZMAX	496240	14.28	15.85	0.03
ZMAX	496245	13.50	15.17	0.12
ZMAX	496260	13.50	15.03	0.28
ZMAX	496270	12.50	13.67	0.25
ZMAX	496280	9.50	12.05	0.62
ZMAX	496310	10.50	11.29	0.68
ZMAX	496320	10.50	11.17	13.70
ZMAX	496340	4.43	8.78	13.68
ZMAX	496350	8.50	9.88	25.07
ZMAX	496360	7.50	8.97	25.27
ZMAX	496370	6.50	8.18	14.23
ZMAX	496380	5.50	7.81	13.72
ZMAX	496390	4.41	7.86	13.72
ZMAX	496395	4.50	7.08	15.50
ZMAX	496400	6.50	7.79	13.72
ZMAX	496410	-0.65	6.62	15.55
ZMAX	496420	3.50	6.23	16.42

ALTERNATIVE 4 5-YEAR 24-HOUR

ZMAX	496430	5.50	9.04	14.10
ZMAX	496440	5.50	7.82	27.10
ZMAX	496450	3.50	7.82	27.10
ZMAX	496460	5.50	9.98	26.00
ZMAX	496470	3.00	6.47	16.43
ZMAX	496480	6.50	8.35	25.10
ZMAX	496485	7.50	10.67	25.40
ZMAX	496490	3.50	8.27	24.98
ZMAX	496500	6.50	11.00	0.00
ZMAX	496510	4.50	7.41	25.10
ZMAX	496515	4.50	7.97	16.62
ZMAX	496520	5.50	7.20	0.17
ZMAX	496530	5.50	6.93	13.82
ZMAX	496540	6.50	7.04	12.72
ZMAX	496545	4.00	6.47	16.43
ZMAX	496550	4.00	6.47	16.43
ZMAX	496560	3.00	6.47	16.43
ZMAX	496570	5.50	6.98	12.68
ZMAX	496580	7.50	10.88	24.98
ZMAX	496590	4.50	6.63	15.57
ZMAX	496600	-1.88	6.46	16.38
ZMAX	496610	4.50	7.18	13.22
ZMAX	496620	4.50	7.17	13.23
ZMAX	497010	11.00	13.88	13.82
ZMAX	497020	3.50	10.01	25.45
ZMAX	497025	8.50	11.09	12.88
ZMAX	497035	6.50	10.20	13.87
ZMAX	497045	4.50	7.67	14.68
ZMAX	497050	3.50	7.66	14.70
ZMAX	497055	3.50	6.68	13.62
ZMAX	497065	1.88	5.11	14.27
ZMAX	497070	8.50	9.97	12.95
ZMAX	497080	2.06	6.03	0.00
ZMAX	497085	6.50	9.91	25.60
ZMAX	497086	6.32	10.19	25.13
ZMAX	497088	5.89	10.01	25.45
ZMAX	497090	4.32	9.92	25.60
ZMAX	497092	3.75	9.06	25.82
ZMAX	497094	2.75	8.61	25.92
ZMAX	497096	2.30	8.13	26.05
ZMAX	497098	1.85	7.99	26.05
ZMAX	497100	-0.16	6.32	25.20
ZMAX	497102	-1.57	5.60	15.05
ZMAX	497104	-2.19	5.46	15.07
ZMAX	497105	-1.00	5.45	15.08
ZMAX	497106	-1.37	4.46	17.10
ZMAX	497107	-2.07	4.41	17.10
ZMAX	497108	-0.37	4.37	17.08
ZMAX	497109	-4.75	4.44	17.22
ZMAX	497111	-3.66	4.35	17.10
ZMAX	497112	-3.66	4.68	17.00
ZMAX	497113	-5.33	4.77	17.10
ZMAX	497110	-0.19	7.02	25.12
ZMAX	497120	1.50	4.43	17.10
ZMAX	497122	4.50	5.42	13.18
ZMAX	497124	4.00	4.44	0.00
ZMAX	497130	-0.21	7.01	25.13
ZMAX	497140	4.00	6.50	0.00
ZMAX	497150	5.40	6.88	12.50
ZMAX	497160	-1.85	6.23	16.42
ZMAX	497161	-2.25	5.90	16.47
ZMAX	497162	-2.86	5.24	16.63
ZMAX	497170	-6.19	3.23	17.08
ZMAX	500010	6.94	10.77	12.72
ZMAX	500020	8.41	9.59	13.77
ZMAX	500025	6.13	9.70	12.83
ZMAX	500030	5.77	9.61	12.88

ALTERNATIVE 4 5-YEAR 24-HOUR

ZMAX	500040	5.07	9.44	12.97
ZMAX	500050	4.00	8.55	12.85
ZMAX	500110	7.43	10.42	12.72
ZMAX	500120	6.16	9.90	26.23
ZMAX	500130	8.00	10.81	13.42
ZMAX	500140	6.39	9.90	26.22
ZMAX	500210	4.00	9.90	26.23
ZMAX	500220	6.91	10.84	12.57
ZMAX	500300	5.00	9.92	12.78
ZMAX	9498000	-6.69	2.96	0.00
ZMAX	9496630	12.00	12.00	0.00
ZMAX	9493020	20.00	20.00	0.00
ZMAX	9493060	22.50	22.50	0.00
ZMAX	9493190	19.00	19.00	0.00
ZMAX	9493140	19.98	19.98	0.00
ZMAX	9493150	19.70	19.70	0.00
ZMAX	9493240	19.00	19.00	0.00
ZMAX	9495030	17.48	17.48	0.00
ZMAX	9495010	23.20	23.20	0.00
ZMAX	9495085	15.10	15.10	0.00
ZMAX	9495140	16.00	16.00	0.00
ZMAX	9495145	16.00	16.00	0.00
ZMAX	9495160	15.50	15.50	0.00
ZMAX	9496320	11.00	11.00	0.00
ZMAX	9496260	14.00	14.00	0.00
ZMAX	9494250	8.30	18.00	0.00
ZMAX	9494190	18.50	18.50	0.00
ZMAX	100043	99.00	99.00	0.00
ZMAX	100044	99.00	99.00	0.00
ZMAX	100045	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100047	99.00	99.00	0.00
ZMAX	100048	99.00	99.00	0.00
ZMAX	100049	99.00	99.00	0.00
ZMAX	100050	99.00	99.00	0.00
ZMAX	100051	99.00	99.00	0.00
ZMAX	100052	99.00	99.00	0.00
ZMAX	100053	99.00	99.00	0.00
ZMAX	100054	99.00	99.00	0.00
ZMAX	100055	99.00	99.00	0.00
ZMAX	100056	99.00	99.00	0.00
ZMAX	100057	99.00	99.00	0.00
ZMAX	100058	99.00	99.00	0.00
ZMAX	100059	99.00	99.00	0.00
ZMAX	100060	99.00	99.00	0.00
ZMAX	100061	99.00	99.00	0.00
ZMAX	100062	99.00	99.00	0.00
ZMAX	100063	99.00	99.00	0.00
ZMAX	100064	99.00	99.00	0.00
ZMAX	100065	99.00	99.00	0.00
ZMAX	100066	99.00	99.00	0.00
ZMAX	100067	99.00	99.00	0.00
ZMAX	100068	99.00	99.00	0.00
ZMAX	100069	99.00	99.00	0.00
ZMAX	100070	99.00	99.00	0.00
ZMAX	100071	99.00	99.00	0.00
ZMAX	100072	99.00	99.00	0.00
ZMAX	100073	99.00	99.00	0.00
ZMAX	100074	99.00	99.00	0.00
ZMAX	100075	99.00	99.00	0.00
ZMAX	100076	99.00	99.00	0.00
ZMAX	100077	99.00	99.00	0.00
ZMAX	100078	99.00	99.00	0.00
ZMAX	100079	99.00	99.00	0.00
ZMAX	100080	99.00	99.00	0.00
ZMAX	100081	99.00	99.00	0.00

ALTERNATIVE 4 5-YEAR 24-HOUR

ZMAX	100082	99.00	99.00	0.00
ZMAX	100083	99.00	99.00	0.00
ZMAX	100084	99.00	99.00	0.00
ZMAX	100085	99.00	99.00	0.00
ZMAX	100086	99.00	99.00	0.00
ZMAX	100087	99.00	99.00	0.00
ZMAX	100088	99.00	99.00	0.00
ZMAX	100089	99.00	99.00	0.00
ZMAX	493341	16.30	18.54	15.63
ZMAX	493481	15.80	18.38	15.67
ZMAX	493471	14.80	17.42	16.40
ZMAX	494131	14.10	16.91	16.70
ZMAX	494151	13.50	16.52	16.83
ZMAX	494111	12.90	16.26	16.87
ZMAX	494201	11.80	15.29	16.48
ZMAX	494211	11.60	15.17	16.40
ZMAX	494221	10.80	14.58	16.00
ZMAX	494231	10.40	14.27	15.95
ZMAX	494241	9.60	14.81	0.20
ZMAX	494251	9.10	15.65	0.12
ZMAX	493342	16.33	18.59	0.00
ZMAX	493482	15.51	16.28	14.28
ZMAX	493472	14.80	14.80	0.00
ZMAX	494132	14.10	14.10	0.00
ZMAX	494152	13.50	13.50	0.00
ZMAX	494112	15.29	16.23	0.10
ZMAX	494202	11.80	11.80	0.00
ZMAX	494212	14.87	20.05	0.00
ZMAX	494222	15.75	16.35	0.03
ZMAX	494232	16.04	18.83	0.00
ZMAX	494242	15.77	19.32	0.00
ZMAX	494252	9.10	9.10	0.00
ZMAX	9494250	8.30	8.30	0.00
ZMAX	9494251	3.10	9.27	18.78
ZMAX	9494252	-6.30	-5.33	18.78

ALTERNATIVE 4 25-YEAR 24-HOUR

	JUNC ID	INVT	Z_MAX	T_MAX
ZMAX	490000	24.23	28.42	23.23
ZMAX	490004	26.46	28.74	23.30
ZMAX	490002	20.93	28.40	23.22
ZMAX	490008	27.00	28.75	30.02
ZMAX	490010	26.16	28.77	27.03
ZMAX	490020	24.36	28.66	32.30
ZMAX	490030	26.46	28.67	26.00
ZMAX	490040	29.00	30.43	26.53
ZMAX	490050	25.16	28.78	15.58
ZMAX	490070	25.96	29.86	23.30
ZMAX	490071	29.00	30.10	14.08
ZMAX	490072	27.00	28.61	27.35
ZMAX	490073	30.00	32.38	13.73
ZMAX	490080	27.66	30.09	20.65
ZMAX	490090	28.00	31.09	17.40
ZMAX	490100	29.00	29.86	23.38
ZMAX	490110	26.16	30.42	21.98
ZMAX	490120	30.64	33.28	88.07
ZMAX	490130	28.96	33.31	88.03
ZMAX	490140	29.26	31.82	240.00
ZMAX	490141	31.00	32.77	26.40
ZMAX	490150	29.89	34.11	86.20
ZMAX	490160	29.77	35.55	76.17
ZMAX	490170	35.00	38.95	18.53
ZMAX	490180	32.66	38.72	29.67
ZMAX	490181	33.75	38.72	29.78
ZMAX	490200	36.66	38.92	14.87
ZMAX	490210	36.29	38.67	18.67
ZMAX	490211	39.00	40.68	15.37
ZMAX	490220	40.04	42.87	15.73
ZMAX	490221	42.00	45.25	24.38
ZMAX	490230	39.95	41.46	25.25
ZMAX	490240	26.36	31.08	20.87
ZMAX	490250	29.00	33.11	18.93
ZMAX	490251	33.00	35.73	29.95
ZMAX	490260	31.16	34.72	19.57
ZMAX	490261	34.00	36.25	13.68
ZMAX	490263	34.00	35.98	28.08
ZMAX	490264	33.00	35.25	19.08
ZMAX	490266	34.00	36.12	16.08
ZMAX	490270	35.00	38.99	14.97
ZMAX	490280	32.70	35.73	29.95
ZMAX	490281	32.70	35.73	29.90
ZMAX	490290	31.00	34.93	16.10
ZMAX	490300	31.86	34.84	17.57
ZMAX	490310	33.00	37.13	17.63
ZMAX	490320	34.00	37.98	16.77
ZMAX	490321	36.00	38.60	24.48
ZMAX	490330	37.00	38.74	15.72
ZMAX	490340	35.00	37.94	15.93
ZMAX	490350	36.00	38.77	15.67
ZMAX	490370	33.96	36.43	57.00
ZMAX	490375	35.00	38.61	54.25
ZMAX	490390	34.56	38.71	19.92
ZMAX	490391	36.80	38.00	21.57
ZMAX	490392	36.40	37.07	15.38
ZMAX	490400	37.00	39.01	16.07
ZMAX	490401	37.00	39.71	25.98
ZMAX	490410	35.46	38.61	54.18
ZMAX	490411	36.00	38.61	54.30
ZMAX	490420	35.00	40.76	48.58
ZMAX	490421	39.00	40.16	28.50
ZMAX	490422	39.00	41.18	16.93
ZMAX	490425	38.00	40.76	49.17
ZMAX	490430	35.47	41.32	28.23
ZMAX	490440	40.00	43.49	26.10

ALTERNATIVE 4 25-YEAR 24-HOUR

ZMAX	490450	39.00	40.86	25.57
ZMAX	490451	39.00	40.57	63.08
ZMAX	490453	39.00	40.57	63.08
ZMAX	490455	39.00	40.77	18.40
ZMAX	490460	43.00	46.56	27.58
ZMAX	490470	40.00	42.50	36.25
ZMAX	490480	39.67	42.50	36.18
ZMAX	490490	40.38	42.78	21.83
ZMAX	490500	41.00	45.04	35.87
ZMAX	490510	49.00	51.19	17.32
ZMAX	490520	43.47	49.71	24.33
ZMAX	490530	51.00	54.87	82.32
ZMAX	490535	56.47	58.48	15.63
ZMAX	490540	56.00	58.76	15.58
ZMAX	490550	48.00	49.84	16.68
ZMAX	490555	48.07	52.12	13.70
ZMAX	490560	49.00	50.03	16.08
ZMAX	490580	35.47	41.48	28.00
ZMAX	490590	48.37	49.84	25.68
ZMAX	490600	42.54	44.75	15.92
ZMAX	490610	39.77	42.47	26.28
ZMAX	490612	42.00	44.27	15.28
ZMAX	490620	41.70	43.14	15.70
ZMAX	490621	44.00	45.43	18.08
ZMAX	490630	42.17	45.13	22.68
ZMAX	490637	41.53	43.06	14.32
ZMAX	490638	44.12	44.62	24.58
ZMAX	490639	48.72	49.71	15.05
ZMAX	490640	37.57	41.57	26.95
ZMAX	490641	44.00	48.12	24.27
ZMAX	490642	45.16	48.40	16.60
ZMAX	490643	39.87	45.63	16.23
ZMAX	490644	47.67	49.63	15.20
ZMAX	490645	48.67	51.72	14.87
ZMAX	490646	41.53	47.77	14.02
ZMAX	490650	43.27	45.90	17.90
ZMAX	490651	48.16	50.96	16.93
ZMAX	490652	43.47	46.34	14.20
ZMAX	490654	46.00	48.44	17.00
ZMAX	490655	46.55	48.90	14.03
ZMAX	490659	45.57	49.12	15.45
ZMAX	490660	39.87	47.60	15.55
ZMAX	490661	45.57	50.45	15.18
ZMAX	490670	45.37	49.21	15.73
ZMAX	490675	41.87	49.03	15.62
ZMAX	490680	47.11	50.23	16.72
ZMAX	490690	45.49	49.30	15.95
ZMAX	490700	53.74	59.45	29.95
ZMAX	490710	47.96	52.70	27.10
ZMAX	490711	52.00	54.53	16.28
ZMAX	490720	50.00	52.67	27.00
ZMAX	490730	50.23	53.77	26.23
ZMAX	490740	49.64	54.17	16.68
ZMAX	490742	58.00	59.70	28.00
ZMAX	490743	48.76	54.22	17.32
ZMAX	490744	49.87	54.22	17.32
ZMAX	490745	57.00	59.70	28.00
ZMAX	490746	57.00	60.23	26.48
ZMAX	490750	51.30	54.18	17.95
ZMAX	490751	55.00	56.59	25.63
ZMAX	490760	50.95	54.43	24.75
ZMAX	490770	51.91	55.55	26.07
ZMAX	490771	55.00	56.66	25.73
ZMAX	490772	56.00	57.91	26.25
ZMAX	490773	56.00	59.07	25.82
ZMAX	490776	56.00	57.62	25.05
ZMAX	490779	55.00	57.37	16.63

ALTERNATIVE 4 25-YEAR 24-HOUR

ZMAX	490780	54.21	57.67	22.25
ZMAX	490790	53.17	55.58	28.32
ZMAX	490791	56.00	58.61	27.17
ZMAX	490792	56.00	58.35	25.97
ZMAX	490794	56.00	57.67	29.38
ZMAX	490795	56.00	57.44	27.33
ZMAX	490800	53.17	55.96	14.97
ZMAX	490801	55.00	57.44	16.42
ZMAX	490802	56.00	58.00	25.58
ZMAX	490803	57.00	58.52	27.98
ZMAX	490804	56.00	58.52	27.70
ZMAX	490900	53.67	55.58	28.42
ZMAX	491010	22.06	25.52	14.12
ZMAX	491019	26.44	27.85	18.53
ZMAX	491020	26.14	29.05	16.60
ZMAX	491021	26.00	29.05	17.78
ZMAX	491022	27.07	29.04	17.30
ZMAX	491040	23.16	25.71	14.08
ZMAX	491041	26.86	29.46	13.87
ZMAX	491042	27.66	28.87	16.80
ZMAX	491043	27.17	28.78	16.83
ZMAX	491044	27.66	29.37	13.92
ZMAX	491060	25.96	29.82	63.60
ZMAX	491080	25.66	30.05	63.60
ZMAX	491100	28.96	31.12	62.93
ZMAX	491102	29.00	31.46	13.23
ZMAX	491120	27.86	31.87	84.13
ZMAX	491121	29.25	32.32	29.87
ZMAX	491122	32.00	33.38	13.42
ZMAX	491123	32.00	33.78	17.00
ZMAX	491140	29.62	32.47	29.55
ZMAX	491160	30.66	33.39	16.55
ZMAX	491180	32.00	35.42	26.15
ZMAX	491200	34.46	37.36	15.20
ZMAX	491220	36.97	38.44	19.33
ZMAX	491221	33.05	36.58	15.85
ZMAX	491222	36.80	38.95	13.12
ZMAX	491223	34.39	36.59	15.83
ZMAX	491240	31.00	33.19	27.75
ZMAX	491260	29.00	31.91	41.52
ZMAX	491280	29.00	32.00	38.45
ZMAX	491285	30.77	39.04	14.15
ZMAX	491300	29.00	31.92	41.52
ZMAX	491302	33.00	36.56	16.10
ZMAX	491320	32.90	36.55	15.93
ZMAX	491340	29.17	32.95	42.82
ZMAX	491344	36.00	38.48	27.60
ZMAX	491342	31.36	34.15	14.47
ZMAX	491360	33.97	36.88	16.73
ZMAX	491380	31.36	35.65	16.87
ZMAX	491382	33.00	33.59	14.38
ZMAX	491384	30.00	32.34	19.10
ZMAX	491387	34.17	39.59	25.35
ZMAX	491388	34.17	41.26	23.77
ZMAX	491390	36.63	39.63	15.52
ZMAX	491391	35.17	39.68	25.27
ZMAX	491393	42.00	45.45	23.05
ZMAX	491394	36.67	40.94	15.98
ZMAX	491395	35.27	39.68	25.25
ZMAX	491396	38.00	41.23	25.05
ZMAX	491397	32.07	39.50	25.43
ZMAX	491398	42.00	44.13	19.02
ZMAX	491399	38.00	41.28	23.77
ZMAX	491400	33.27	38.16	25.80
ZMAX	491401	36.77	42.43	14.37
ZMAX	491402	32.17	39.56	25.02
ZMAX	491404	38.96	41.29	23.82

ALTERNATIVE 4 25-YEAR 24-HOUR

ZMAX	491406	36.77	40.95	15.97
ZMAX	491407	32.17	39.52	25.22
ZMAX	491392	43.00	47.53	19.02
ZMAX	491403	45.00	48.19	18.73
ZMAX	491440	38.17	39.98	20.50
ZMAX	491441	38.54	39.98	20.45
ZMAX	491460	30.71	36.68	14.35
ZMAX	491465	31.27	36.50	25.53
ZMAX	491480	33.87	36.84	13.53
ZMAX	491500	30.00	36.55	27.15
ZMAX	491501	31.17	36.54	27.22
ZMAX	491502	36.00	38.05	24.28
ZMAX	491520	38.15	41.52	13.77
ZMAX	491540	41.00	44.22	16.58
ZMAX	491541	42.00	46.58	27.38
ZMAX	491452	42.00	44.02	19.80
ZMAX	491453	37.18	40.18	13.47
ZMAX	491560	41.00	41.97	29.05
ZMAX	491561	38.00	42.12	29.67
ZMAX	491562	44.00	45.31	30.95
ZMAX	491563	39.00	42.12	29.67
ZMAX	491580	36.55	38.25	240.00
ZMAX	491600	39.73	42.59	159.15
ZMAX	491620	45.57	47.10	27.02
ZMAX	491621	48.00	50.63	27.65
ZMAX	490232	44.00	46.68	15.08
ZMAX	490431	41.00	44.60	26.55
ZMAX	490449	41.00	43.73	16.33
ZMAX	490457	39.00	40.79	18.67
ZMAX	490491	47.00	50.31	219.30
ZMAX	490492	47.00	51.03	17.72
ZMAX	490501	46.00	49.01	13.98
ZMAX	490511	48.00	50.60	28.05
ZMAX	490561	57.00	58.80	27.85
ZMAX	490581	44.00	46.11	14.50
ZMAX	490582	50.00	52.16	14.25
ZMAX	490584	50.00	52.32	25.10
ZMAX	490587	53.00	57.25	14.03
ZMAX	490701	54.00	58.71	15.35
ZMAX	490702	57.00	60.53	15.67
ZMAX	490703	53.74	55.40	14.15
ZMAX	490704	56.00	60.69	13.47
ZMAX	490713	52.00	54.37	19.92
ZMAX	490741	58.00	59.18	28.28
ZMAX	490762	56.00	59.03	25.53
ZMAX	490781	58.00	62.09	17.28
ZMAX	491274	31.22	39.06	14.17
ZMAX	491284	33.92	36.96	14.38
ZMAX	491389	39.00	40.60	20.42
ZMAX	491700	23.00	27.53	20.18
ZMAX	491701	9.70	25.35	29.83
ZMAX	491702	55.00	57.51	32.57
ZMAX	491703	25.00	27.50	15.93
ZMAX	491704	56.00	58.78	15.47
ZMAX	491705	55.80	57.51	32.57
ZMAX	491706	48.90	51.94	27.80
ZMAX	491707	45.00	46.96	30.25
ZMAX	491708	36.00	38.59	24.65
ZMAX	491709	37.00	39.24	15.80
ZMAX	491710	27.00	28.89	15.88
ZMAX	491711	24.00	26.41	25.53
ZMAX	491712	30.33	34.47	29.73
ZMAX	491713	30.00	34.07	63.08
ZMAX	491714	31.00	32.38	17.52
ZMAX	491715	40.17	42.50	36.28
ZMAX	491716	30.00	34.88	25.02
ZMAX	491717	52.00	55.24	16.38

ALTERNATIVE 4 25-YEAR 24-HOUR

ZMAX	491718	34.00	36.55	14.83
ZMAX	491719	42.00	46.66	28.32
ZMAX	491720	38.00	40.61	15.87
ZMAX	491721	38.00	40.53	25.87
ZMAX	491722	39.00	39.92	17.15
ZMAX	491723	29.00	37.81	56.38
ZMAX	491724	29.00	34.88	24.98
ZMAX	491725	33.00	34.40	16.27
ZMAX	491728	30.00	35.21	15.82
ZMAX	491729	27.00	31.35	24.37
ZMAX	491730	26.00	29.87	18.22
ZMAX	491737	38.00	38.64	15.87
ZMAX	491740	37.00	38.62	15.67
ZMAX	491745	37.00	39.14	17.67
ZMAX	491746	37.00	39.08	26.35
ZMAX	491750	44.00	46.32	27.67
ZMAX	491753	49.00	51.45	21.95
ZMAX	490574	41.77	46.00	16.02
ZMAX	491405	42.00	44.60	17.08
ZMAX	490714	52.00	54.56	16.50
ZMAX	490753	51.00	54.46	29.98
ZMAX	491224	39.00	42.78	28.87
ZMAX	491225	41.50	43.96	14.92
ZMAX	491759	39.00	40.68	22.40
ZMAX	491760	39.00	40.61	22.92
ZMAX	491764	38.00	40.38	24.43
ZMAX	491768	38.00	40.29	24.43
ZMAX	499999	35.85	40.24	24.48
ZMAX	499998	35.80	40.22	24.47
ZMAX	499997	35.00	36.00	24.45
ZMAX	491002	30.84	34.07	63.83
ZMAX	491001	28.00	34.07	63.40
ZMAX	100000	99.00	99.00	0.00
ZMAX	100001	99.00	99.00	0.00
ZMAX	100002	99.00	99.00	0.00
ZMAX	100003	99.00	99.00	0.00
ZMAX	100004	99.00	99.00	0.00
ZMAX	100005	99.00	99.00	0.00
ZMAX	100006	99.00	99.00	0.00
ZMAX	100007	99.00	99.00	0.00
ZMAX	100008	99.00	99.00	0.00
ZMAX	100009	99.00	99.00	0.00
ZMAX	100010	99.00	99.00	0.00
ZMAX	100011	99.00	99.00	0.00
ZMAX	100012	99.00	99.00	0.00
ZMAX	100013	99.00	99.00	0.00
ZMAX	100014	99.00	99.00	0.00
ZMAX	100015	99.00	99.00	0.00
ZMAX	100016	99.00	99.00	0.00
ZMAX	100017	99.00	99.00	0.00
ZMAX	100018	99.00	99.00	0.00
ZMAX	100019	99.00	99.00	0.00
ZMAX	100020	99.00	99.00	0.00
ZMAX	100021	99.00	99.00	0.00
ZMAX	100022	99.00	99.00	0.00
ZMAX	100023	99.00	99.00	0.00
ZMAX	100024	99.00	99.00	0.00
ZMAX	100025	99.00	99.00	0.00
ZMAX	100026	99.00	99.00	0.00
ZMAX	100027	99.00	99.00	0.00
ZMAX	100028	99.00	99.00	0.00
ZMAX	100029	99.00	99.00	0.00
ZMAX	100030	99.00	99.00	0.00
ZMAX	100031	99.00	99.00	0.00
ZMAX	100032	99.00	99.00	0.00
ZMAX	100033	99.00	99.00	0.00
ZMAX	100034	99.00	99.00	0.00

ALTERNATIVE 4 25-YEAR 24-HOUR

ZMAX	100035	99.00	99.00	0.00
ZMAX	100036	99.00	99.00	0.00
ZMAX	100037	99.00	99.00	0.00
ZMAX	100038	99.00	99.00	0.00
ZMAX	100039	99.00	99.00	0.00
ZMAX	100040	99.00	99.00	0.00
ZMAX	493010	17.00	23.49	25.48
ZMAX	493020	20.00	23.04	18.10
ZMAX	493030	18.00	24.47	13.05
ZMAX	493040	17.00	22.33	17.12
ZMAX	493060	21.00	21.50	13.27
ZMAX	493070	19.00	26.94	13.57
ZMAX	493090	18.00	23.45	25.08
ZMAX	493100	20.00	21.15	12.67
ZMAX	493110	18.00	20.02	12.90
ZMAX	493120	18.00	19.99	0.00
ZMAX	493130	17.00	20.16	12.70
ZMAX	493140	16.00	18.79	13.38
ZMAX	493150	16.00	19.40	13.03
ZMAX	493180	18.00	24.21	14.08
ZMAX	493185	19.00	24.19	14.08
ZMAX	493190	17.00	19.35	12.98
ZMAX	493195	17.00	20.16	13.05
ZMAX	493200	18.00	20.05	24.20
ZMAX	493210	18.00	19.27	12.98
ZMAX	493215	19.00	21.01	20.03
ZMAX	493220	16.00	19.14	13.10
ZMAX	493230	15.50	18.79	13.38
ZMAX	493240	16.00	19.33	27.43
ZMAX	493250	17.00	24.21	14.08
ZMAX	493260	21.00	24.19	13.65
ZMAX	493270	19.00	24.18	13.65
ZMAX	493280	19.00	23.09	13.00
ZMAX	493290	19.00	22.29	13.02
ZMAX	493310	17.00	23.87	23.67
ZMAX	493320	17.00	20.05	24.20
ZMAX	493330	17.00	20.00	24.43
ZMAX	493340	16.33	19.99	24.22
ZMAX	493350	15.50	17.76	13.03
ZMAX	493360	13.00	18.00	0.00
ZMAX	493370	14.61	18.28	13.85
ZMAX	493380	14.50	17.53	14.83
ZMAX	493390	14.50	18.09	13.43
ZMAX	493400	13.50	17.54	14.80
ZMAX	493410	12.50	17.53	14.82
ZMAX	493420	13.50	16.28	0.03
ZMAX	493430	12.44	15.94	0.07
ZMAX	493440	15.50	19.33	27.43
ZMAX	493450	18.00	19.61	17.95
ZMAX	493470	16.00	19.60	17.93
ZMAX	493480	15.50	19.61	17.78
ZMAX	493500	12.27	16.53	14.25
ZMAX	493505	12.27	15.33	16.00
ZMAX	493520	11.76	14.59	15.52
ZMAX	493525	11.00	14.54	15.40
ZMAX	493530	14.50	17.29	13.67
ZMAX	493535	15.00	17.29	13.67
ZMAX	493540	13.50	15.99	0.00
ZMAX	493545	9.65	14.52	15.35
ZMAX	493550	14.50	15.24	12.67
ZMAX	493555	13.50	14.88	13.63
ZMAX	494010	24.80	26.00	0.00
ZMAX	494020	22.90	25.59	12.67
ZMAX	494025	20.00	21.25	12.73
ZMAX	494030	22.00	22.74	13.00
ZMAX	494040	19.00	20.56	13.03
ZMAX	494045	18.70	20.56	13.03

ALTERNATIVE 4 25-YEAR 24-HOUR

ZMAX	494050	20.00	25.00	0.00
ZMAX	494060	25.00	26.00	0.00
ZMAX	494070	18.00	19.88	13.68
ZMAX	494072	19.00	22.07	13.53
ZMAX	494074	20.00	21.08	12.73
ZMAX	494076	19.00	21.08	12.72
ZMAX	494078	21.00	22.18	12.73
ZMAX	494080	18.00	20.17	12.83
ZMAX	494100	17.00	19.59	18.17
ZMAX	494110	15.29	19.59	18.12
ZMAX	494120	18.00	19.60	18.07
ZMAX	494130	17.00	19.60	18.03
ZMAX	494140	14.50	18.07	16.07
ZMAX	494150	15.00	19.60	18.07
ZMAX	494170	18.00	19.89	13.65
ZMAX	494180	17.00	19.64	14.57
ZMAX	494185	17.00	19.77	13.73
ZMAX	494190	17.00	18.88	13.82
ZMAX	494200	15.00	19.59	18.23
ZMAX	494205	17.00	19.59	18.22
ZMAX	494210	14.87	18.80	0.00
ZMAX	494220	15.75	18.74	15.32
ZMAX	494230	16.00	18.75	15.32
ZMAX	494240	15.71	19.08	13.60
ZMAX	494250	16.70	18.59	13.80
ZMAX	495010	20.00	23.23	12.52
ZMAX	495020	15.50	19.33	27.43
ZMAX	495030	15.50	19.33	27.43
ZMAX	495035	19.00	21.09	24.97
ZMAX	495038	17.00	18.17	12.78
ZMAX	495040	16.00	18.70	12.88
ZMAX	495045	15.00	15.88	12.68
ZMAX	495050	15.50	18.89	24.92
ZMAX	495055	15.50	16.83	12.57
ZMAX	495060	14.80	15.87	12.70
ZMAX	495065	14.50	16.26	12.57
ZMAX	495070	11.50	13.52	17.40
ZMAX	495075	11.50	13.13	20.62
ZMAX	495080	13.18	13.99	0.00
ZMAX	495085	13.00	15.04	17.12
ZMAX	495090	11.42	13.34	14.25
ZMAX	495100	15.00	18.08	17.97
ZMAX	495110	14.50	17.09	12.50
ZMAX	495120	13.00	14.23	12.92
ZMAX	495125	14.42	16.08	13.40
ZMAX	495140	14.50	16.81	26.47
ZMAX	495145	14.50	16.81	26.47
ZMAX	495150	13.00	14.24	12.92
ZMAX	495152	12.50	16.09	25.52
ZMAX	495154	12.50	16.02	19.38
ZMAX	495155	12.50	16.02	19.38
ZMAX	495156	12.50	13.49	0.00
ZMAX	495160	12.50	16.03	24.87
ZMAX	495162	13.50	15.57	25.52
ZMAX	495165	13.50	16.01	17.57
ZMAX	495170	12.50	15.75	13.55
ZMAX	495180	10.45	12.55	21.62
ZMAX	495210	12.50	14.68	25.08
ZMAX	495215	12.50	14.23	12.93
ZMAX	495230	8.82	12.33	13.10
ZMAX	495235	10.50	13.88	24.82
ZMAX	495240	8.50	10.93	23.33
ZMAX	495260	13.00	16.05	24.57
ZMAX	495270	12.50	14.22	12.93
ZMAX	495275	11.50	13.22	12.92
ZMAX	495280	10.90	11.27	12.97
ZMAX	495300	13.94	15.70	13.52

ALTERNATIVE 4 25-YEAR 24-HOUR

ZMAX	495302	13.90	15.66	13.48
ZMAX	495304	13.31	15.59	13.22
ZMAX	495306	12.73	14.38	13.83
ZMAX	495308	12.18	14.26	14.15
ZMAX	495310	11.49	13.32	13.40
ZMAX	495312	10.92	13.29	13.28
ZMAX	495314	10.43	13.15	20.55
ZMAX	495316	11.80	14.15	12.53
ZMAX	495320	9.75	13.15	20.57
ZMAX	495322	9.64	14.36	15.53
ZMAX	495324	9.44	14.13	15.67
ZMAX	495326	9.30	13.63	16.90
ZMAX	495328	9.43	13.52	17.38
ZMAX	495330	9.20	13.52	17.40
ZMAX	495332	9.02	13.52	17.33
ZMAX	495334	8.90	13.31	17.95
ZMAX	495336	8.72	13.14	20.52
ZMAX	495338	8.53	13.13	20.62
ZMAX	495340	8.40	13.13	20.62
ZMAX	495342	8.23	13.12	20.65
ZMAX	495344	8.04	12.98	21.02
ZMAX	495346	7.85	12.84	21.27
ZMAX	495348	7.66	12.55	21.62
ZMAX	495350	7.47	11.25	22.58
ZMAX	495352	7.34	10.94	23.32
ZMAX	495354	7.26	10.93	23.32
ZMAX	495356	7.19	10.89	23.35
ZMAX	496010	14.50	16.20	0.10
ZMAX	496020	14.50	18.79	0.00
ZMAX	496030	14.50	16.31	0.02
ZMAX	496060	16.60	16.77	12.83
ZMAX	496065	14.00	16.25	0.08
ZMAX	496070	14.00	16.22	0.10
ZMAX	496080	14.20	17.99	0.00
ZMAX	496090	14.00	17.99	0.00
ZMAX	496100	12.50	15.90	0.07
ZMAX	496110	11.00	15.41	13.82
ZMAX	496120	13.00	15.31	13.30
ZMAX	496125	12.00	14.28	17.42
ZMAX	496130	13.00	15.35	13.68
ZMAX	496150	14.00	15.39	13.82
ZMAX	496160	11.00	14.28	17.42
ZMAX	496170	12.00	15.40	13.83
ZMAX	496175	12.00	14.85	12.57
ZMAX	496180	11.00	13.26	13.02
ZMAX	496190	11.00	13.25	13.02
ZMAX	496200	10.50	11.30	13.83
ZMAX	496232	16.00	18.00	0.00
ZMAX	496234	14.00	16.36	0.15
ZMAX	496235	15.00	15.40	0.12
ZMAX	496240	14.28	15.85	0.03
ZMAX	496245	13.50	15.17	0.12
ZMAX	496260	13.50	15.03	0.28
ZMAX	496270	12.50	13.69	12.98
ZMAX	496280	9.50	12.12	13.60
ZMAX	496310	10.50	11.36	13.62
ZMAX	496320	10.50	11.24	13.65
ZMAX	496340	4.43	10.29	14.05
ZMAX	496350	8.50	10.59	25.02
ZMAX	496360	7.50	9.08	13.68
ZMAX	496370	6.50	8.40	13.95
ZMAX	496380	5.50	8.26	14.80
ZMAX	496390	4.41	8.32	14.75
ZMAX	496395	4.50	8.11	14.90
ZMAX	496400	6.50	8.26	14.78
ZMAX	496410	-0.65	8.11	14.88
ZMAX	496420	3.50	7.16	15.95

ALTERNATIVE 4 25-YEAR 24-HOUR

ZMAX	496430	5.50	9.18	12.98
ZMAX	496440	5.50	8.08	13.80
ZMAX	496450	3.50	8.07	13.80
ZMAX	496460	5.50	10.10	14.18
ZMAX	496470	3.00	7.57	16.67
ZMAX	496480	6.50	10.06	15.08
ZMAX	496485	7.50	11.00	16.52
ZMAX	496490	3.50	9.02	20.33
ZMAX	496500	6.50	11.00	0.00
ZMAX	496510	4.50	8.50	240.00
ZMAX	496515	4.50	8.04	13.15
ZMAX	496520	5.50	7.58	16.67
ZMAX	496530	5.50	7.58	16.67
ZMAX	496540	6.50	7.57	16.67
ZMAX	496545	4.00	7.57	16.67
ZMAX	496550	4.00	7.57	16.67
ZMAX	496560	3.00	7.57	16.65
ZMAX	496570	5.50	7.57	16.67
ZMAX	496580	7.50	11.01	13.97
ZMAX	496590	4.50	8.11	14.90
ZMAX	496600	-1.88	7.57	16.60
ZMAX	496610	4.50	7.26	13.10
ZMAX	496620	4.50	7.24	13.10
ZMAX	497010	11.00	13.93	13.30
ZMAX	497020	3.50	10.66	23.68
ZMAX	497025	8.50	11.15	12.73
ZMAX	497035	6.50	10.48	13.15
ZMAX	497045	4.50	8.01	13.30
ZMAX	497050	3.50	8.00	13.30
ZMAX	497055	3.50	6.73	12.67
ZMAX	497065	1.88	6.12	14.70
ZMAX	497070	8.50	10.07	12.88
ZMAX	497080	2.06	6.03	12.95
ZMAX	497085	6.50	10.49	23.85
ZMAX	497086	6.32	10.88	23.35
ZMAX	497088	5.89	10.66	23.68
ZMAX	497090	4.32	10.56	23.80
ZMAX	497092	3.75	10.31	23.90
ZMAX	497094	2.75	9.88	23.95
ZMAX	497096	2.30	9.02	24.00
ZMAX	497098	1.85	8.75	24.00
ZMAX	497100	-0.16	7.34	23.72
ZMAX	497102	-1.57	6.82	23.47
ZMAX	497104	-2.19	6.56	23.37
ZMAX	497105	-1.00	6.54	23.35
ZMAX	497106	-1.37	5.52	16.82
ZMAX	497107	-2.07	5.49	16.80
ZMAX	497108	-0.37	5.47	16.78
ZMAX	497109	-4.75	5.57	16.77
ZMAX	497111	-3.66	5.51	16.75
ZMAX	497112	-3.66	5.64	16.80
ZMAX	497113	-5.33	6.21	16.78
ZMAX	497110	-0.19	7.66	15.87
ZMAX	497120	1.50	5.50	16.82
ZMAX	497122	4.50	5.50	16.82
ZMAX	497124	4.00	5.50	16.82
ZMAX	497130	-0.21	7.28	15.08
ZMAX	497140	4.00	6.50	0.00
ZMAX	497150	5.40	6.91	12.50
ZMAX	497160	-1.85	7.14	16.05
ZMAX	497161	-2.25	6.72	16.20
ZMAX	497162	-2.86	6.01	16.48
ZMAX	497170	-6.19	3.66	16.80
ZMAX	500010	6.94	11.25	12.75
ZMAX	500020	8.41	10.31	14.28
ZMAX	500025	6.13	11.05	12.97
ZMAX	500030	5.77	11.04	12.97

ALTERNATIVE 4 25-YEAR 24-HOUR

ZMAX	500040	5.07	10.55	13.05
ZMAX	500050	4.00	9.05	24.00
ZMAX	500110	7.43	11.26	12.82
ZMAX	500120	6.16	10.56	23.95
ZMAX	500130	8.00	11.90	13.58
ZMAX	500140	6.39	10.59	24.58
ZMAX	500210	4.00	10.59	24.58
ZMAX	500220	6.91	11.27	12.73
ZMAX	500300	5.00	10.08	12.68
ZMAX	9498000	-6.69	2.96	0.00
ZMAX	9496630	12.00	12.00	0.00
ZMAX	9493020	20.00	20.00	0.00
ZMAX	9493060	22.50	22.50	0.00
ZMAX	9493190	19.00	19.00	0.00
ZMAX	9493140	19.98	19.98	0.00
ZMAX	9493150	19.70	19.70	0.00
ZMAX	9493240	19.00	19.00	0.00
ZMAX	9495030	17.48	17.48	0.00
ZMAX	9495010	23.20	23.20	0.00
ZMAX	9495085	15.10	15.10	0.00
ZMAX	9495140	16.00	16.00	0.00
ZMAX	9495145	16.00	16.00	0.00
ZMAX	9495160	15.50	15.50	0.00
ZMAX	9496320	11.00	11.00	0.00
ZMAX	9496260	14.00	14.00	0.00
ZMAX	9494250	8.30	18.00	0.00
ZMAX	9494190	18.50	18.50	0.00
ZMAX	100043	99.00	99.00	0.00
ZMAX	100044	99.00	99.00	0.00
ZMAX	100045	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100047	99.00	99.00	0.00
ZMAX	100048	99.00	99.00	0.00
ZMAX	100049	99.00	99.00	0.00
ZMAX	100050	99.00	99.00	0.00
ZMAX	100051	99.00	99.00	0.00
ZMAX	100052	99.00	99.00	0.00
ZMAX	100053	99.00	99.00	0.00
ZMAX	100054	99.00	99.00	0.00
ZMAX	100055	99.00	99.00	0.00
ZMAX	100056	99.00	99.00	0.00
ZMAX	100057	99.00	99.00	0.00
ZMAX	100058	99.00	99.00	0.00
ZMAX	100059	99.00	99.00	0.00
ZMAX	100060	99.00	99.00	0.00
ZMAX	100061	99.00	99.00	0.00
ZMAX	100062	99.00	99.00	0.00
ZMAX	100063	99.00	99.00	0.00
ZMAX	100064	99.00	99.00	0.00
ZMAX	100065	99.00	99.00	0.00
ZMAX	100066	99.00	99.00	0.00
ZMAX	100067	99.00	99.00	0.00
ZMAX	100068	99.00	99.00	0.00
ZMAX	100069	99.00	99.00	0.00
ZMAX	100070	99.00	99.00	0.00
ZMAX	100071	99.00	99.00	0.00
ZMAX	100072	99.00	99.00	0.00
ZMAX	100073	99.00	99.00	0.00
ZMAX	100074	99.00	99.00	0.00
ZMAX	100075	99.00	99.00	0.00
ZMAX	100076	99.00	99.00	0.00
ZMAX	100077	99.00	99.00	0.00
ZMAX	100078	99.00	99.00	0.00
ZMAX	100079	99.00	99.00	0.00
ZMAX	100080	99.00	99.00	0.00
ZMAX	100081	99.00	99.00	0.00

ALTERNATIVE 4 25-YEAR 24-HOUR

ZMAX	100082	99.00	99.00	0.00
ZMAX	100083	99.00	99.00	0.00
ZMAX	100084	99.00	99.00	0.00
ZMAX	100085	99.00	99.00	0.00
ZMAX	100086	99.00	99.00	0.00
ZMAX	100087	99.00	99.00	0.00
ZMAX	100088	99.00	99.00	0.00
ZMAX	100089	99.00	99.00	0.00
ZMAX	493341	16.30	18.98	17.40
ZMAX	493481	15.80	18.88	17.50
ZMAX	493471	14.80	18.04	17.72
ZMAX	494131	14.10	17.63	17.83
ZMAX	494151	13.50	17.32	17.88
ZMAX	494111	12.90	17.12	17.88
ZMAX	494201	11.80	16.22	17.65
ZMAX	494211	11.60	16.11	17.57
ZMAX	494221	10.80	15.57	16.98
ZMAX	494231	10.40	15.27	16.77
ZMAX	494241	9.60	14.81	0.20
ZMAX	494251	9.10	15.65	0.12
ZMAX	493342	16.33	18.59	0.00
ZMAX	493482	15.51	16.53	14.25
ZMAX	493472	14.80	14.80	0.00
ZMAX	494132	14.10	14.10	0.00
ZMAX	494152	13.50	13.50	0.00
ZMAX	494112	15.29	16.23	0.10
ZMAX	494202	11.80	11.80	0.00
ZMAX	494212	14.87	20.05	0.00
ZMAX	494222	15.75	16.35	0.03
ZMAX	494232	16.04	18.83	0.00
ZMAX	494242	15.77	19.32	0.00
ZMAX	494252	9.10	9.10	0.00
ZMAX	9494250	8.30	8.30	0.00
ZMAX	9494251	3.10	10.82	18.25
ZMAX	9494252	-6.30	-4.74	18.25

Alternative 5 Pump Diversion

ALTERNATIVE 5 5-YEAR 24-HOUR

	JUNC ID	INVT	Z_MAX	T_MAX
ZMAX	490000	24.23	26.46	0.00
ZMAX	490004	26.46	27.84	25.85
ZMAX	490002	20.93	26.14	29.05
ZMAX	490008	27.00	28.09	29.87
ZMAX	490010	26.16	28.19	39.67
ZMAX	490020	24.36	28.20	26.73
ZMAX	490030	26.46	28.14	25.25
ZMAX	490040	29.00	29.90	26.57
ZMAX	490050	25.16	28.39	15.43
ZMAX	490070	25.96	29.13	26.62
ZMAX	490071	29.00	29.91	14.60
ZMAX	490072	27.00	28.02	27.30
ZMAX	490073	30.00	32.31	14.45
ZMAX	490080	27.66	29.13	27.27
ZMAX	490090	28.00	30.71	27.40
ZMAX	490100	29.00	29.69	14.10
ZMAX	490110	26.16	29.70	25.18
ZMAX	490120	30.64	33.01	69.37
ZMAX	490130	28.96	33.02	69.32
ZMAX	490140	29.26	31.53	240.00
ZMAX	490141	31.00	32.13	26.37
ZMAX	490150	29.89	33.27	67.15
ZMAX	490160	29.77	34.52	59.60
ZMAX	490170	35.00	38.56	26.23
ZMAX	490180	32.66	37.49	26.72
ZMAX	490181	33.75	37.49	26.82
ZMAX	490200	36.66	38.56	26.23
ZMAX	490210	36.29	38.35	0.00
ZMAX	490211	39.00	40.60	17.20
ZMAX	490220	40.04	42.02	15.35
ZMAX	490221	42.00	44.50	30.53
ZMAX	490230	39.95	40.97	25.65
ZMAX	490240	26.36	30.28	24.42
ZMAX	490250	29.00	32.36	21.48
ZMAX	490251	33.00	34.78	29.83
ZMAX	490260	31.16	33.28	16.17
ZMAX	490261	34.00	36.08	13.83
ZMAX	490263	34.00	35.25	28.05
ZMAX	490264	33.00	34.83	24.37
ZMAX	490266	34.00	35.80	16.42
ZMAX	490270	35.00	37.74	14.40
ZMAX	490280	32.70	34.78	29.83
ZMAX	490281	32.70	34.78	29.75
ZMAX	490290	31.00	34.39	16.30
ZMAX	490300	31.86	33.17	13.50
ZMAX	490310	33.00	36.26	18.32
ZMAX	490320	34.00	37.76	20.60
ZMAX	490321	36.00	38.24	37.90
ZMAX	490330	37.00	38.66	27.77
ZMAX	490340	35.00	37.83	14.20
ZMAX	490350	36.00	38.67	25.85
ZMAX	490370	33.96	35.92	25.73
ZMAX	490375	35.00	38.08	57.12
ZMAX	490390	34.56	37.97	24.93
ZMAX	490391	36.80	37.26	26.05
ZMAX	490392	36.40	36.82	15.00
ZMAX	490400	37.00	38.89	25.85
ZMAX	490401	37.00	39.37	25.98
ZMAX	490410	35.46	38.08	57.23
ZMAX	490411	36.00	38.08	57.23
ZMAX	490420	35.00	40.20	50.95
ZMAX	490421	39.00	39.74	28.53
ZMAX	490422	39.00	41.05	25.17
ZMAX	490425	38.00	40.20	51.63
ZMAX	490430	35.47	40.69	26.00
ZMAX	490440	40.00	42.84	26.75

ALTERNATIVE 5 5-YEAR 24-HOUR

ZMAX	490450	39.00	40.58	57.92
ZMAX	490451	39.00	40.14	29.65
ZMAX	490453	39.00	40.14	31.75
ZMAX	490455	39.00	40.60	21.83
ZMAX	490460	43.00	45.73	27.53
ZMAX	490470	40.00	41.74	25.50
ZMAX	490480	39.67	42.00	0.00
ZMAX	490490	40.38	42.30	19.83
ZMAX	490500	41.00	44.61	59.72
ZMAX	490510	49.00	50.73	17.83
ZMAX	490520	43.47	48.11	27.60
ZMAX	490530	51.00	54.16	83.12
ZMAX	490535	56.47	57.94	16.12
ZMAX	490540	56.00	58.17	16.05
ZMAX	490550	48.00	49.28	17.52
ZMAX	490555	48.07	51.02	13.92
ZMAX	490560	49.00	49.74	16.27
ZMAX	490580	35.47	40.81	25.98
ZMAX	490590	48.37	49.31	26.27
ZMAX	490600	42.54	44.45	25.78
ZMAX	490610	39.77	41.38	27.08
ZMAX	490612	42.00	44.20	27.75
ZMAX	490620	41.70	42.88	16.80
ZMAX	490621	44.00	45.18	27.30
ZMAX	490630	42.17	44.53	20.53
ZMAX	490637	41.53	42.43	14.78
ZMAX	490638	44.12	44.50	24.82
ZMAX	490639	48.72	49.21	14.53
ZMAX	490640	37.57	40.86	25.33
ZMAX	490641	44.00	46.73	24.48
ZMAX	490642	45.16	47.24	16.32
ZMAX	490643	39.87	44.93	16.70
ZMAX	490644	47.67	49.21	14.60
ZMAX	490645	48.67	51.27	24.60
ZMAX	490646	41.53	47.31	14.48
ZMAX	490650	43.27	45.09	19.27
ZMAX	490651	48.16	50.18	16.65
ZMAX	490652	43.47	46.22	13.98
ZMAX	490654	46.00	48.13	26.82
ZMAX	490655	46.55	48.83	14.98
ZMAX	490659	45.57	48.11	14.32
ZMAX	490660	39.87	46.11	14.37
ZMAX	490661	45.57	49.72	16.63
ZMAX	490670	45.37	48.30	14.27
ZMAX	490675	41.87	48.11	14.30
ZMAX	490680	47.11	49.55	16.67
ZMAX	490690	45.49	48.39	14.18
ZMAX	490700	53.74	58.68	29.58
ZMAX	490710	47.96	52.09	27.78
ZMAX	490711	52.00	54.43	21.28
ZMAX	490720	50.00	52.14	27.97
ZMAX	490730	50.23	52.56	25.45
ZMAX	490740	49.64	53.25	17.57
ZMAX	490742	58.00	59.32	14.05
ZMAX	490743	48.76	53.27	18.00
ZMAX	490744	49.87	53.27	18.00
ZMAX	490745	57.00	59.15	29.72
ZMAX	490746	57.00	59.23	26.50
ZMAX	490750	51.30	53.51	16.03
ZMAX	490751	55.00	56.23	25.60
ZMAX	490760	50.95	53.93	20.07
ZMAX	490770	51.91	55.20	27.10
ZMAX	490771	55.00	56.06	25.68
ZMAX	490772	56.00	57.26	26.22
ZMAX	490773	56.00	58.54	25.82
ZMAX	490776	56.00	57.12	27.18
ZMAX	490779	55.00	57.10	24.95

ALTERNATIVE 5 5-YEAR 24-HOUR

ZMAX	490780	54.21	57.06	20.42
ZMAX	490790	53.17	55.16	41.82
ZMAX	490791	56.00	57.79	27.22
ZMAX	490792	56.00	57.63	26.03
ZMAX	490794	56.00	57.24	29.38
ZMAX	490795	56.00	56.98	27.40
ZMAX	490800	53.17	55.62	14.60
ZMAX	490801	55.00	57.11	25.08
ZMAX	490802	56.00	57.35	25.72
ZMAX	490803	57.00	57.89	28.22
ZMAX	490804	56.00	57.89	27.72
ZMAX	490900	53.67	55.16	41.90
ZMAX	491010	22.06	24.94	14.25
ZMAX	491019	26.44	27.43	17.70
ZMAX	491020	26.14	28.53	16.78
ZMAX	491021	26.00	28.54	17.08
ZMAX	491022	27.07	28.53	16.93
ZMAX	491040	23.16	25.04	14.20
ZMAX	491041	26.86	29.01	13.92
ZMAX	491042	27.66	28.61	16.12
ZMAX	491043	27.17	28.39	16.33
ZMAX	491044	27.66	28.94	13.97
ZMAX	491060	25.96	28.98	116.40
ZMAX	491080	25.66	29.01	116.38
ZMAX	491100	28.96	30.31	96.63
ZMAX	491102	29.00	31.08	13.28
ZMAX	491120	27.86	30.30	78.73
ZMAX	491121	29.25	32.22	42.45
ZMAX	491122	32.00	33.30	13.50
ZMAX	491123	32.00	33.51	17.65
ZMAX	491140	29.62	32.27	42.22
ZMAX	491160	30.66	32.57	17.13
ZMAX	491180	32.00	34.31	25.73
ZMAX	491200	34.46	36.56	14.65
ZMAX	491220	36.97	38.07	19.53
ZMAX	491221	33.05	36.27	14.00
ZMAX	491222	36.80	38.34	13.12
ZMAX	491223	34.39	36.28	13.98
ZMAX	491240	31.00	32.45	27.82
ZMAX	491260	29.00	31.14	86.48
ZMAX	491280	29.00	31.31	84.15
ZMAX	491285	30.77	38.29	14.47
ZMAX	491300	29.00	31.31	84.15
ZMAX	491302	33.00	36.22	18.52
ZMAX	491320	32.90	36.23	14.03
ZMAX	491340	29.17	31.70	35.60
ZMAX	491344	36.00	37.90	27.73
ZMAX	491342	31.36	34.00	14.92
ZMAX	491360	33.97	36.54	16.25
ZMAX	491380	31.36	35.21	17.23
ZMAX	491382	33.00	33.42	14.47
ZMAX	491384	30.00	32.09	26.75
ZMAX	491387	34.17	38.94	49.85
ZMAX	491388	34.17	40.79	26.65
ZMAX	491390	36.63	38.94	49.28
ZMAX	491391	35.17	38.97	49.28
ZMAX	491393	42.00	44.71	19.67
ZMAX	491394	36.67	40.02	17.42
ZMAX	491395	35.27	38.97	49.27
ZMAX	491396	38.00	40.30	27.32
ZMAX	491397	32.07	38.93	49.85
ZMAX	491398	42.00	44.02	41.60
ZMAX	491399	38.00	40.79	26.65
ZMAX	491400	33.27	35.12	13.50
ZMAX	491401	36.77	42.20	14.83
ZMAX	491402	32.17	38.94	49.30
ZMAX	491404	38.96	40.79	27.17

ALTERNATIVE 5 5-YEAR 24-HOUR

ZMAX	491406	36.77	40.02	17.37
ZMAX	491407	32.17	38.93	50.13
ZMAX	491392	43.00	47.25	27.48
ZMAX	491403	45.00	48.01	29.82
ZMAX	491440	38.17	39.66	27.67
ZMAX	491441	38.54	39.66	27.65
ZMAX	491460	30.71	35.80	24.70
ZMAX	491465	31.27	35.83	25.23
ZMAX	491480	33.87	36.50	13.55
ZMAX	491500	30.00	35.85	26.38
ZMAX	491501	31.17	35.84	26.03
ZMAX	491502	36.00	37.76	27.88
ZMAX	491520	38.15	40.01	13.38
ZMAX	491540	41.00	43.84	27.87
ZMAX	491541	42.00	45.46	27.55
ZMAX	491452	42.00	43.55	26.18
ZMAX	491453	37.18	39.41	13.48
ZMAX	491560	41.00	41.59	28.95
ZMAX	491561	38.00	41.35	29.92
ZMAX	491562	44.00	44.85	31.13
ZMAX	491563	39.00	41.35	29.92
ZMAX	491580	36.55	37.57	28.97
ZMAX	491600	39.73	41.37	240.00
ZMAX	491620	45.57	46.63	28.27
ZMAX	491621	48.00	50.20	27.60
ZMAX	490232	44.00	46.41	16.42
ZMAX	490431	41.00	44.07	26.53
ZMAX	490449	41.00	43.29	17.73
ZMAX	490457	39.00	40.61	22.20
ZMAX	490491	47.00	48.42	29.25
ZMAX	490492	47.00	50.25	29.27
ZMAX	490501	46.00	48.82	14.10
ZMAX	490511	48.00	49.65	28.08
ZMAX	490561	57.00	58.11	27.78
ZMAX	490581	44.00	45.94	15.03
ZMAX	490582	50.00	51.82	18.60
ZMAX	490584	50.00	51.51	26.03
ZMAX	490587	53.00	56.61	16.95
ZMAX	490701	54.00	58.55	20.10
ZMAX	490702	57.00	60.42	25.63
ZMAX	490703	53.74	55.00	14.12
ZMAX	490704	56.00	60.39	14.15
ZMAX	490713	52.00	53.82	29.12
ZMAX	490741	58.00	58.74	28.33
ZMAX	490762	56.00	58.18	27.28
ZMAX	490781	58.00	61.75	17.97
ZMAX	491274	31.22	38.40	14.72
ZMAX	491284	33.92	36.06	14.38
ZMAX	491389	39.00	40.35	27.20
ZMAX	491700	23.00	26.12	24.52
ZMAX	491701	9.70	24.05	37.10
ZMAX	491702	55.00	56.74	35.83
ZMAX	491703	25.00	27.31	18.43
ZMAX	491704	56.00	58.66	16.53
ZMAX	491705	55.80	56.74	35.83
ZMAX	491706	48.90	51.25	27.72
ZMAX	491707	45.00	46.40	30.12
ZMAX	491708	36.00	38.27	28.08
ZMAX	491709	37.00	39.09	16.23
ZMAX	491710	27.00	28.65	16.65
ZMAX	491711	24.00	25.42	40.30
ZMAX	491712	30.33	33.33	29.95
ZMAX	491713	30.00	33.34	30.13
ZMAX	491714	31.00	32.02	21.07
ZMAX	491715	40.17	41.74	25.38
ZMAX	491716	30.00	34.36	28.57
ZMAX	491717	52.00	55.10	26.70

ALTERNATIVE 5 5-YEAR 24-HOUR

ZMAX	491718	34.00	36.29	15.75
ZMAX	491719	42.00	45.70	28.52
ZMAX	491720	38.00	40.31	16.47
ZMAX	491721	38.00	39.98	25.93
ZMAX	491722	39.00	39.57	16.95
ZMAX	491723	29.00	37.08	39.95
ZMAX	491724	29.00	34.36	28.88
ZMAX	491725	33.00	33.95	16.62
ZMAX	491728	30.00	34.61	27.77
ZMAX	491729	27.00	30.19	27.33
ZMAX	491730	26.00	29.17	22.00
ZMAX	491737	38.00	38.53	16.62
ZMAX	491740	37.00	38.49	16.32
ZMAX	491745	37.00	38.92	21.35
ZMAX	491746	37.00	38.72	28.12
ZMAX	491750	44.00	45.43	27.72
ZMAX	491753	49.00	50.77	29.85
ZMAX	490574	41.77	45.22	15.65
ZMAX	491405	42.00	44.34	28.37
ZMAX	490714	52.00	54.09	17.12
ZMAX	490753	51.00	53.78	28.50
ZMAX	491224	39.00	41.41	28.83
ZMAX	491225	41.50	43.41	14.97
ZMAX	491759	39.00	40.31	21.92
ZMAX	491760	39.00	40.27	22.13
ZMAX	491764	38.00	40.00	20.45
ZMAX	491768	38.00	39.63	22.73
ZMAX	499999	35.85	39.59	22.75
ZMAX	499998	35.80	39.58	22.72
ZMAX	499997	35.00	35.80	22.72
ZMAX	491002	30.84	33.34	30.13
ZMAX	491001	28.00	33.34	30.08
ZMAX	100000	99.00	99.00	0.00
ZMAX	100001	99.00	99.00	0.00
ZMAX	100002	99.00	99.00	0.00
ZMAX	100003	99.00	99.00	0.00
ZMAX	100004	99.00	99.00	0.00
ZMAX	100005	99.00	99.00	0.00
ZMAX	100006	99.00	99.00	0.00
ZMAX	100007	99.00	99.00	0.00
ZMAX	100008	99.00	99.00	0.00
ZMAX	100009	99.00	99.00	0.00
ZMAX	100010	99.00	99.00	0.00
ZMAX	100011	99.00	99.00	0.00
ZMAX	100012	99.00	99.00	0.00
ZMAX	100013	99.00	99.00	0.00
ZMAX	100014	99.00	99.00	0.00
ZMAX	100015	99.00	99.00	0.00
ZMAX	100016	99.00	99.00	0.00
ZMAX	100017	99.00	99.00	0.00
ZMAX	100018	99.00	99.00	0.00
ZMAX	100019	99.00	99.00	0.00
ZMAX	100020	99.00	99.00	0.00
ZMAX	100021	99.00	99.00	0.00
ZMAX	100022	99.00	99.00	0.00
ZMAX	100023	99.00	99.00	0.00
ZMAX	100024	99.00	99.00	0.00
ZMAX	100025	99.00	99.00	0.00
ZMAX	100026	99.00	99.00	0.00
ZMAX	100027	99.00	99.00	0.00
ZMAX	100028	99.00	99.00	0.00
ZMAX	100029	99.00	99.00	0.00
ZMAX	100030	99.00	99.00	0.00
ZMAX	100031	99.00	99.00	0.00
ZMAX	100032	99.00	99.00	0.00
ZMAX	100033	99.00	99.00	0.00
ZMAX	100034	99.00	99.00	0.00

ALTERNATIVE 5 5-YEAR 24-HOUR

ZMAX	100035	99.00	99.00	0.00
ZMAX	100036	99.00	99.00	0.00
ZMAX	100037	99.00	99.00	0.00
ZMAX	100038	99.00	99.00	0.00
ZMAX	100039	99.00	99.00	0.00
ZMAX	100040	99.00	99.00	0.00
ZMAX	493010	17.00	22.66	25.45
ZMAX	493020	20.00	22.62	27.23
ZMAX	493030	18.00	24.41	13.30
ZMAX	493040	17.00	22.11	21.47
ZMAX	493060	21.00	21.45	13.35
ZMAX	493070	19.00	25.64	13.65
ZMAX	493090	18.00	22.29	25.08
ZMAX	493100	20.00	21.11	12.67
ZMAX	493110	18.00	19.93	12.95
ZMAX	493120	18.00	19.99	0.00
ZMAX	493130	17.00	20.08	13.00
ZMAX	493140	16.00	18.43	13.70
ZMAX	493150	16.00	19.33	13.83
ZMAX	493180	18.00	24.08	14.90
ZMAX	493185	19.00	23.23	18.43
ZMAX	493190	17.00	19.21	13.03
ZMAX	493195	17.00	20.06	13.65
ZMAX	493200	18.00	19.64	14.00
ZMAX	493210	18.00	19.18	13.03
ZMAX	493215	19.00	20.75	25.27
ZMAX	493220	16.00	18.96	13.32
ZMAX	493230	15.50	18.43	13.70
ZMAX	493240	16.00	19.06	14.82
ZMAX	493250	17.00	24.08	14.90
ZMAX	493260	21.00	24.08	14.97
ZMAX	493270	19.00	24.07	14.97
ZMAX	493280	19.00	23.06	13.03
ZMAX	493290	19.00	22.23	15.38
ZMAX	493310	17.00	21.71	29.07
ZMAX	493320	17.00	19.80	0.00
ZMAX	493330	17.00	19.63	14.03
ZMAX	493340	16.33	19.62	14.00
ZMAX	493350	15.50	17.69	13.17
ZMAX	493360	13.00	18.00	0.00
ZMAX	493370	14.61	17.75	13.97
ZMAX	493380	14.50	17.08	17.00
ZMAX	493390	14.50	17.86	13.77
ZMAX	493400	13.50	17.08	16.98
ZMAX	493410	12.50	17.08	16.98
ZMAX	493420	13.50	16.29	0.03
ZMAX	493430	12.44	15.97	0.08
ZMAX	493440	15.50	18.71	56.02
ZMAX	493450	18.00	18.84	14.95
ZMAX	493470	16.00	18.83	14.97
ZMAX	493480	15.50	18.84	14.95
ZMAX	493500	12.27	16.79	14.65
ZMAX	493505	12.27	16.26	17.22
ZMAX	493520	11.76	14.57	17.10
ZMAX	493525	11.00	14.46	16.90
ZMAX	493530	14.50	17.13	16.60
ZMAX	493535	15.00	17.13	16.60
ZMAX	493540	13.50	15.99	0.00
ZMAX	493545	9.65	14.41	16.95
ZMAX	493550	14.50	15.20	12.70
ZMAX	493555	13.50	14.81	12.50
ZMAX	494010	24.80	26.00	0.00
ZMAX	494020	22.90	25.55	12.93
ZMAX	494025	20.00	21.16	12.95
ZMAX	494030	22.00	22.69	13.00
ZMAX	494040	19.00	20.45	13.07
ZMAX	494045	18.70	20.44	13.07

ALTERNATIVE 5 5-YEAR 24-HOUR

ZMAX	494050	20.00	25.00	0.00
ZMAX	494060	25.00	26.00	0.00
ZMAX	494070	18.00	19.71	13.70
ZMAX	494072	19.00	22.01	24.17
ZMAX	494074	20.00	21.05	13.12
ZMAX	494076	19.00	21.05	12.68
ZMAX	494078	21.00	22.12	12.85
ZMAX	494080	18.00	20.11	13.10
ZMAX	494100	17.00	19.06	15.18
ZMAX	494110	15.29	16.78	12.70
ZMAX	494120	18.00	19.22	13.35
ZMAX	494130	17.00	18.20	14.80
ZMAX	494140	14.50	18.19	14.82
ZMAX	494150	15.00	16.99	0.00
ZMAX	494170	18.00	19.72	13.67
ZMAX	494180	17.00	19.60	15.65
ZMAX	494185	17.00	19.56	13.80
ZMAX	494190	17.00	18.34	13.85
ZMAX	494200	15.00	16.97	0.03
ZMAX	494205	17.00	18.99	15.12
ZMAX	494210	14.87	18.80	0.00
ZMAX	494220	15.75	18.22	0.02
ZMAX	494230	16.00	18.09	0.03
ZMAX	494240	15.71	18.22	13.45
ZMAX	494250	16.70	17.98	0.00
ZMAX	495010	20.00	23.20	0.00
ZMAX	495020	15.50	18.71	28.10
ZMAX	495030	15.50	18.71	28.10
ZMAX	495035	19.00	20.34	24.98
ZMAX	495038	17.00	18.10	12.90
ZMAX	495040	16.00	18.63	12.92
ZMAX	495045	15.00	15.77	12.73
ZMAX	495050	15.50	18.34	24.92
ZMAX	495055	15.50	16.79	12.95
ZMAX	495060	14.80	15.76	12.73
ZMAX	495065	14.50	16.15	13.05
ZMAX	495070	11.50	13.33	23.33
ZMAX	495075	11.50	12.91	26.27
ZMAX	495080	13.18	13.99	0.00
ZMAX	495085	13.00	15.02	20.35
ZMAX	495090	11.42	12.99	14.20
ZMAX	495100	15.00	18.15	16.62
ZMAX	495110	14.50	17.04	12.75
ZMAX	495120	13.00	14.12	13.35
ZMAX	495125	14.42	15.96	14.05
ZMAX	495140	14.50	16.55	17.73
ZMAX	495145	14.50	16.39	240.00
ZMAX	495150	13.00	14.12	13.35
ZMAX	495152	12.50	15.08	25.55
ZMAX	495154	12.50	15.43	25.97
ZMAX	495155	12.50	15.43	25.97
ZMAX	495156	12.50	13.49	0.00
ZMAX	495160	12.50	15.34	25.58
ZMAX	495162	13.50	14.84	25.57
ZMAX	495165	13.50	15.49	25.70
ZMAX	495170	12.50	15.70	24.82
ZMAX	495180	10.45	12.41	0.00
ZMAX	495210	12.50	13.90	25.12
ZMAX	495215	12.50	14.12	13.35
ZMAX	495230	8.82	11.69	13.03
ZMAX	495235	10.50	13.33	24.80
ZMAX	495240	8.50	10.15	29.37
ZMAX	495260	13.00	15.50	23.82
ZMAX	495270	12.50	14.11	13.35
ZMAX	495275	11.50	13.10	13.50
ZMAX	495280	10.90	11.14	13.52
ZMAX	495300	13.94	15.46	14.30

ALTERNATIVE 5 5-YEAR 24-HOUR

ZMAX	495302	13.90	15.41	14.35
ZMAX	495304	13.31	15.27	13.30
ZMAX	495306	12.73	14.11	14.57
ZMAX	495308	12.18	14.02	14.85
ZMAX	495310	11.49	12.96	13.53
ZMAX	495312	10.92	12.94	13.42
ZMAX	495314	10.43	12.92	26.22
ZMAX	495316	11.80	14.11	12.53
ZMAX	495320	9.75	12.92	26.25
ZMAX	495322	9.64	14.08	17.47
ZMAX	495324	9.44	13.88	17.80
ZMAX	495326	9.30	13.44	20.12
ZMAX	495328	9.43	13.33	23.25
ZMAX	495330	9.20	13.33	23.33
ZMAX	495332	9.02	13.33	23.40
ZMAX	495334	8.90	13.15	24.80
ZMAX	495336	8.72	12.92	26.27
ZMAX	495338	8.53	12.91	26.27
ZMAX	495340	8.40	12.90	26.40
ZMAX	495342	8.23	12.90	26.45
ZMAX	495344	8.04	12.75	26.75
ZMAX	495346	7.85	12.56	27.25
ZMAX	495348	7.66	12.28	27.65
ZMAX	495350	7.47	10.86	28.00
ZMAX	495352	7.34	10.16	29.37
ZMAX	495354	7.26	9.26	13.72
ZMAX	495356	7.19	10.08	29.57
ZMAX	496010	14.50	16.24	0.12
ZMAX	496020	14.50	18.79	0.00
ZMAX	496030	14.50	16.32	0.02
ZMAX	496060	16.60	16.75	12.83
ZMAX	496065	14.00	16.28	0.10
ZMAX	496070	14.00	16.25	0.10
ZMAX	496080	14.20	17.99	0.00
ZMAX	496090	14.00	17.99	0.00
ZMAX	496100	12.50	15.91	0.07
ZMAX	496110	11.00	15.44	14.68
ZMAX	496120	13.00	15.09	14.60
ZMAX	496125	12.00	14.10	19.67
ZMAX	496130	13.00	15.37	14.70
ZMAX	496150	14.00	15.41	14.72
ZMAX	496160	11.00	14.10	19.67
ZMAX	496170	12.00	15.43	14.70
ZMAX	496175	12.00	14.85	14.63
ZMAX	496180	11.00	13.17	14.25
ZMAX	496190	11.00	13.17	14.30
ZMAX	496200	10.50	11.31	14.30
ZMAX	496232	16.00	18.00	0.00
ZMAX	496234	14.00	16.36	0.15
ZMAX	496235	15.00	15.41	0.12
ZMAX	496240	14.28	15.85	0.03
ZMAX	496245	13.50	15.18	0.12
ZMAX	496260	13.50	15.05	0.28
ZMAX	496270	12.50	13.68	0.27
ZMAX	496280	9.50	12.15	14.28
ZMAX	496310	10.50	11.37	14.30
ZMAX	496320	10.50	11.22	14.27
ZMAX	496340	4.43	10.06	14.62
ZMAX	496350	8.50	9.88	25.07
ZMAX	496360	7.50	8.97	25.27
ZMAX	496370	6.50	8.18	14.23
ZMAX	496380	5.50	8.03	15.77
ZMAX	496390	4.41	8.10	15.68
ZMAX	496395	4.50	7.89	16.13
ZMAX	496400	6.50	8.03	15.73
ZMAX	496410	-0.65	7.89	16.13
ZMAX	496420	3.50	6.87	18.18

ALTERNATIVE 5 5-YEAR 24-HOUR

ZMAX	496430	5.50	9.04	14.10
ZMAX	496440	5.50	7.82	27.10
ZMAX	496450	3.50	7.82	27.10
ZMAX	496460	5.50	9.98	26.00
ZMAX	496470	3.00	7.30	18.18
ZMAX	496480	6.50	8.35	25.10
ZMAX	496485	7.50	10.67	25.40
ZMAX	496490	3.50	8.27	24.98
ZMAX	496500	6.50	11.00	0.00
ZMAX	496510	4.50	7.41	25.10
ZMAX	496515	4.50	7.97	16.62
ZMAX	496520	5.50	7.30	18.20
ZMAX	496530	5.50	7.30	18.20
ZMAX	496540	6.50	7.30	18.18
ZMAX	496545	4.00	7.30	18.18
ZMAX	496550	4.00	7.30	18.18
ZMAX	496560	3.00	7.30	18.17
ZMAX	496570	5.50	7.30	18.20
ZMAX	496580	7.50	10.88	24.98
ZMAX	496590	4.50	7.89	16.13
ZMAX	496600	-1.88	7.29	18.12
ZMAX	496610	4.50	7.18	13.22
ZMAX	496620	4.50	7.17	13.23
ZMAX	497010	11.00	13.88	13.82
ZMAX	497020	3.50	9.94	13.95
ZMAX	497025	8.50	11.09	12.88
ZMAX	497035	6.50	10.20	13.87
ZMAX	497045	4.50	7.67	14.68
ZMAX	497050	3.50	7.66	14.70
ZMAX	497055	3.50	6.68	13.62
ZMAX	497065	1.88	5.10	14.30
ZMAX	497070	8.50	9.97	12.95
ZMAX	497080	2.06	6.03	0.00
ZMAX	497085	6.50	9.85	31.00
ZMAX	497086	6.32	10.11	29.37
ZMAX	497088	5.89	9.93	30.38
ZMAX	497090	4.32	9.85	31.00
ZMAX	497092	3.75	8.91	31.07
ZMAX	497094	2.75	8.47	31.07
ZMAX	497096	2.30	8.03	31.08
ZMAX	497098	1.85	7.90	31.08
ZMAX	497100	-0.16	6.06	31.02
ZMAX	497102	-1.57	5.48	15.35
ZMAX	497104	-2.19	5.35	15.37
ZMAX	497105	-1.00	5.35	15.37
ZMAX	497106	-1.37	4.70	18.77
ZMAX	497107	-2.07	4.68	18.77
ZMAX	497108	-0.37	4.67	18.75
ZMAX	497109	-4.75	4.75	18.50
ZMAX	497111	-3.66	4.68	18.68
ZMAX	497112	-3.66	4.91	18.70
ZMAX	497113	-5.33	5.11	18.70
ZMAX	497110	-0.19	7.02	25.12
ZMAX	497120	1.50	4.69	18.77
ZMAX	497122	4.50	5.42	13.18
ZMAX	497124	4.00	4.69	18.77
ZMAX	497130	-0.21	7.01	25.13
ZMAX	497140	4.00	6.50	0.00
ZMAX	497150	5.40	6.88	12.50
ZMAX	497160	-1.85	6.87	18.18
ZMAX	497161	-2.25	6.43	18.22
ZMAX	497162	-2.86	5.66	18.37
ZMAX	497170	-6.19	3.35	18.67
ZMAX	500010	6.94	10.77	12.72
ZMAX	500020	8.41	9.59	13.77
ZMAX	500025	6.13	9.70	12.85
ZMAX	500030	5.77	9.61	12.88

ALTERNATIVE 5 5-YEAR 24-HOUR

ZMAX	500040	5.07	9.44	12.97
ZMAX	500050	4.00	8.55	12.85
ZMAX	500110	7.43	10.43	12.73
ZMAX	500120	6.16	9.83	32.42
ZMAX	500130	8.00	10.81	13.42
ZMAX	500140	6.39	9.83	32.38
ZMAX	500210	4.00	9.83	32.22
ZMAX	500220	6.91	10.84	12.57
ZMAX	500300	5.00	9.92	12.78
ZMAX	9498000	-6.69	2.96	0.00
ZMAX	9496630	12.00	12.00	0.00
ZMAX	9493020	20.00	20.00	0.00
ZMAX	9493060	22.50	22.50	0.00
ZMAX	9493190	19.00	19.00	0.00
ZMAX	9493140	19.98	19.98	0.00
ZMAX	9493150	19.70	19.70	0.00
ZMAX	9493240	19.00	19.00	0.00
ZMAX	9495030	17.48	17.48	0.00
ZMAX	9495010	23.20	23.20	0.00
ZMAX	9495085	15.10	15.10	0.00
ZMAX	9495140	16.00	16.00	0.00
ZMAX	9495145	16.00	16.00	0.00
ZMAX	9495160	15.50	15.50	0.00
ZMAX	9496320	11.00	11.00	0.00
ZMAX	9496260	14.00	14.00	0.00
ZMAX	9494250	18.00	18.00	0.00
ZMAX	9494190	18.50	18.50	0.00
ZMAX	100043	99.00	99.00	0.00
ZMAX	100044	99.00	99.00	0.00
ZMAX	100045	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100047	99.00	99.00	0.00
ZMAX	100048	99.00	99.00	0.00
ZMAX	100049	99.00	99.00	0.00
ZMAX	100050	99.00	99.00	0.00
ZMAX	100051	99.00	99.00	0.00
ZMAX	100052	99.00	99.00	0.00
ZMAX	100053	99.00	99.00	0.00
ZMAX	100054	99.00	99.00	0.00
ZMAX	100055	99.00	99.00	0.00
ZMAX	100056	99.00	99.00	0.00
ZMAX	100057	99.00	99.00	0.00
ZMAX	100058	99.00	99.00	0.00
ZMAX	100059	99.00	99.00	0.00
ZMAX	100060	99.00	99.00	0.00
ZMAX	100061	99.00	99.00	0.00
ZMAX	100062	99.00	99.00	0.00
ZMAX	100063	99.00	99.00	0.00
ZMAX	100064	99.00	99.00	0.00
ZMAX	100065	99.00	99.00	0.00
ZMAX	100066	99.00	99.00	0.00
ZMAX	100067	99.00	99.00	0.00
ZMAX	100068	99.00	99.00	0.00
ZMAX	100069	99.00	99.00	0.00
ZMAX	100070	99.00	99.00	0.00
ZMAX	100071	99.00	99.00	0.00
ZMAX	100072	99.00	99.00	0.00
ZMAX	100073	99.00	99.00	0.00
ZMAX	100074	99.00	99.00	0.00
ZMAX	100075	99.00	99.00	0.00
ZMAX	100076	99.00	99.00	0.00
ZMAX	100077	99.00	99.00	0.00
ZMAX	100078	99.00	99.00	0.00
ZMAX	100079	99.00	99.00	0.00
ZMAX	100080	99.00	99.00	0.00
ZMAX	100081	99.00	99.00	0.00

ALTERNATIVE 5 5-YEAR 24-HOUR

ZMAX	100082	99.00	99.00	0.00
ZMAX	100083	99.00	99.00	0.00
ZMAX	100084	99.00	99.00	0.00
ZMAX	100085	99.00	99.00	0.00
ZMAX	100086	99.00	99.00	0.00
ZMAX	100087	99.00	99.00	0.00
ZMAX	100088	99.00	99.00	0.00
ZMAX	100089	99.00	99.00	0.00
ZMAX	9498100	-6.69	3.41	239.98

ALTERNATIVE 5 25-YEAR 24-HOUR

	JUNC ID	INVT	Z_MAX	T_MAX
ZMAX	490000	24.23	28.37	45.23
ZMAX	490004	26.46	28.52	23.28
ZMAX	490002	20.93	28.37	45.22
ZMAX	490008	27.00	28.75	30.02
ZMAX	490010	26.16	28.77	27.03
ZMAX	490020	24.36	28.66	32.30
ZMAX	490030	26.46	28.67	26.00
ZMAX	490040	29.00	30.43	26.53
ZMAX	490050	25.16	28.78	15.58
ZMAX	490070	25.96	29.85	23.03
ZMAX	490071	29.00	30.10	14.08
ZMAX	490072	27.00	28.61	27.35
ZMAX	490073	30.00	32.38	13.73
ZMAX	490080	27.66	30.09	20.65
ZMAX	490090	28.00	31.09	17.40
ZMAX	490100	29.00	29.86	23.15
ZMAX	490110	26.16	30.42	21.98
ZMAX	490120	30.64	33.28	87.92
ZMAX	490130	28.96	33.31	87.88
ZMAX	490140	29.26	31.82	240.00
ZMAX	490141	31.00	32.77	26.40
ZMAX	490150	29.89	34.11	86.20
ZMAX	490160	29.77	35.55	76.17
ZMAX	490170	35.00	38.95	18.53
ZMAX	490180	32.66	38.72	29.67
ZMAX	490181	33.75	38.72	29.78
ZMAX	490200	36.66	38.92	14.87
ZMAX	490210	36.29	38.67	18.67
ZMAX	490211	39.00	40.68	15.37
ZMAX	490220	40.04	42.87	15.73
ZMAX	490221	42.00	45.25	24.38
ZMAX	490230	39.95	41.46	25.25
ZMAX	490240	26.36	31.08	20.87
ZMAX	490250	29.00	33.11	18.93
ZMAX	490251	33.00	35.73	29.93
ZMAX	490260	31.16	34.72	19.57
ZMAX	490261	34.00	36.25	13.68
ZMAX	490263	34.00	35.98	28.08
ZMAX	490264	33.00	35.25	19.08
ZMAX	490266	34.00	36.12	16.08
ZMAX	490270	35.00	38.99	14.97
ZMAX	490280	32.70	35.73	29.92
ZMAX	490281	32.70	35.73	29.90
ZMAX	490290	31.00	34.93	16.10
ZMAX	490300	31.86	34.84	17.57
ZMAX	490310	33.00	37.13	17.63
ZMAX	490320	34.00	37.98	16.77
ZMAX	490321	36.00	38.60	24.48
ZMAX	490330	37.00	38.74	15.72
ZMAX	490340	35.00	37.94	15.93
ZMAX	490350	36.00	38.77	15.67
ZMAX	490370	33.96	36.43	57.00
ZMAX	490375	35.00	38.61	54.25
ZMAX	490390	34.56	38.71	19.92
ZMAX	490391	36.80	38.00	21.57
ZMAX	490392	36.40	37.07	15.38
ZMAX	490400	37.00	39.01	16.07
ZMAX	490401	37.00	39.71	25.98
ZMAX	490410	35.46	38.61	54.18
ZMAX	490411	36.00	38.61	54.30
ZMAX	490420	35.00	40.76	48.58
ZMAX	490421	39.00	40.16	28.50
ZMAX	490422	39.00	41.18	16.93
ZMAX	490425	38.00	40.76	49.17
ZMAX	490430	35.47	41.32	28.23
ZMAX	490440	40.00	43.49	26.10

ALTERNATIVE 5 25-YEAR 24-HOUR

ZMAX	490450	39.00	40.86	25.57
ZMAX	490451	39.00	40.57	63.10
ZMAX	490453	39.00	40.57	63.08
ZMAX	490455	39.00	40.77	18.40
ZMAX	490460	43.00	46.56	27.58
ZMAX	490470	40.00	42.50	36.25
ZMAX	490480	39.67	42.50	36.17
ZMAX	490490	40.38	42.78	21.83
ZMAX	490500	41.00	45.04	35.87
ZMAX	490510	49.00	51.19	17.32
ZMAX	490520	43.47	49.71	24.33
ZMAX	490530	51.00	54.87	82.32
ZMAX	490535	56.47	58.48	15.63
ZMAX	490540	56.00	58.76	15.58
ZMAX	490550	48.00	49.84	16.68
ZMAX	490555	48.07	52.12	13.70
ZMAX	490560	49.00	50.03	16.08
ZMAX	490580	35.47	41.48	28.00
ZMAX	490590	48.37	49.84	25.68
ZMAX	490600	42.54	44.75	15.92
ZMAX	490610	39.77	42.47	26.28
ZMAX	490612	42.00	44.27	15.28
ZMAX	490620	41.70	43.14	15.70
ZMAX	490621	44.00	45.43	18.08
ZMAX	490630	42.17	45.13	22.68
ZMAX	490637	41.53	43.06	14.32
ZMAX	490638	44.12	44.62	24.58
ZMAX	490639	48.72	49.71	15.05
ZMAX	490640	37.57	41.57	26.95
ZMAX	490641	44.00	48.12	24.27
ZMAX	490642	45.16	48.40	16.60
ZMAX	490643	39.87	45.63	16.23
ZMAX	490644	47.67	49.63	15.20
ZMAX	490645	48.67	51.72	14.87
ZMAX	490646	41.53	47.77	14.02
ZMAX	490650	43.27	45.90	17.90
ZMAX	490651	48.16	50.96	16.93
ZMAX	490652	43.47	46.34	14.20
ZMAX	490654	46.00	48.44	17.00
ZMAX	490655	46.55	48.90	14.03
ZMAX	490659	45.57	49.12	15.45
ZMAX	490660	39.87	47.60	15.55
ZMAX	490661	45.57	50.45	15.18
ZMAX	490670	45.37	49.21	15.73
ZMAX	490675	41.87	49.03	15.62
ZMAX	490680	47.11	50.23	16.72
ZMAX	490690	45.49	49.30	15.95
ZMAX	490700	53.74	59.45	29.95
ZMAX	490710	47.96	52.70	27.10
ZMAX	490711	52.00	54.53	16.28
ZMAX	490720	50.00	52.67	27.00
ZMAX	490730	50.23	53.77	26.23
ZMAX	490740	49.64	54.17	16.68
ZMAX	490742	58.00	59.70	28.00
ZMAX	490743	48.76	54.22	17.32
ZMAX	490744	49.87	54.22	17.32
ZMAX	490745	57.00	59.70	28.00
ZMAX	490746	57.00	60.23	26.48
ZMAX	490750	51.30	54.18	17.95
ZMAX	490751	55.00	56.59	25.63
ZMAX	490760	50.95	54.43	24.75
ZMAX	490770	51.91	55.55	26.07
ZMAX	490771	55.00	56.66	25.73
ZMAX	490772	56.00	57.91	26.25
ZMAX	490773	56.00	59.07	25.82
ZMAX	490776	56.00	57.62	25.05
ZMAX	490779	55.00	57.37	16.63

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ZMAX	490780	54.21	57.67	22.25
ZMAX	490790	53.17	55.58	28.32
ZMAX	490791	56.00	58.61	27.17
ZMAX	490792	56.00	58.35	25.97
ZMAX	490794	56.00	57.67	29.38
ZMAX	490795	56.00	57.44	27.33
ZMAX	490800	53.17	55.96	14.97
ZMAX	490801	55.00	57.44	16.42
ZMAX	490802	56.00	58.00	25.58
ZMAX	490803	57.00	58.52	27.98
ZMAX	490804	56.00	58.52	27.70
ZMAX	490900	53.67	55.58	28.42
ZMAX	491010	22.06	25.52	14.12
ZMAX	491019	26.44	27.85	18.53
ZMAX	491020	26.14	29.05	16.60
ZMAX	491021	26.00	29.05	17.78
ZMAX	491022	27.07	29.04	17.30
ZMAX	491040	23.16	25.71	14.08
ZMAX	491041	26.86	29.46	13.87
ZMAX	491042	27.66	28.87	16.80
ZMAX	491043	27.17	28.78	16.83
ZMAX	491044	27.66	29.37	13.92
ZMAX	491060	25.96	29.82	63.60
ZMAX	491080	25.66	30.05	63.60
ZMAX	491100	28.96	31.12	62.93
ZMAX	491102	29.00	31.46	13.23
ZMAX	491120	27.86	31.87	84.13
ZMAX	491121	29.25	32.32	29.87
ZMAX	491122	32.00	33.38	13.42
ZMAX	491123	32.00	33.78	17.00
ZMAX	491140	29.62	32.47	29.55
ZMAX	491160	30.66	33.39	16.55
ZMAX	491180	32.00	35.42	26.15
ZMAX	491200	34.46	37.36	15.20
ZMAX	491220	36.97	38.44	19.33
ZMAX	491221	33.05	36.58	15.85
ZMAX	491222	36.80	38.95	13.12
ZMAX	491223	34.39	36.59	15.83
ZMAX	491240	31.00	33.19	27.75
ZMAX	491260	29.00	31.91	41.52
ZMAX	491280	29.00	32.00	38.45
ZMAX	491285	30.77	39.04	14.15
ZMAX	491300	29.00	31.92	41.52
ZMAX	491302	33.00	36.56	16.10
ZMAX	491320	32.90	36.55	15.93
ZMAX	491340	29.17	32.95	42.82
ZMAX	491344	36.00	38.48	27.60
ZMAX	491342	31.36	34.15	14.47
ZMAX	491360	33.97	36.88	16.73
ZMAX	491380	31.36	35.65	16.87
ZMAX	491382	33.00	33.59	14.38
ZMAX	491384	30.00	32.34	19.10
ZMAX	491387	34.17	39.59	25.33
ZMAX	491388	34.17	41.26	23.77
ZMAX	491390	36.63	39.63	15.52
ZMAX	491391	35.17	39.68	25.27
ZMAX	491393	42.00	45.45	23.05
ZMAX	491394	36.67	40.94	15.98
ZMAX	491395	35.27	39.68	25.33
ZMAX	491396	38.00	41.23	25.05
ZMAX	491397	32.07	39.50	25.43
ZMAX	491398	42.00	44.13	19.02
ZMAX	491399	38.00	41.28	23.77
ZMAX	491400	33.27	38.16	25.80
ZMAX	491401	36.77	42.43	14.37
ZMAX	491402	32.17	39.56	25.02
ZMAX	491404	38.96	41.29	23.82

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ZMAX	491406	36.77	40.95	15.97
ZMAX	491407	32.17	39.52	25.22
ZMAX	491392	43.00	47.53	19.02
ZMAX	491403	45.00	48.19	18.73
ZMAX	491440	38.17	39.98	20.50
ZMAX	491441	38.54	39.98	20.45
ZMAX	491460	30.71	36.68	14.35
ZMAX	491465	31.27	36.50	25.52
ZMAX	491480	33.87	36.84	13.53
ZMAX	491500	30.00	36.55	27.15
ZMAX	491501	31.17	36.54	27.22
ZMAX	491502	36.00	38.05	24.28
ZMAX	491520	38.15	41.52	13.77
ZMAX	491540	41.00	44.22	16.58
ZMAX	491541	42.00	46.58	27.38
ZMAX	491452	42.00	44.02	19.80
ZMAX	491453	37.18	40.18	13.47
ZMAX	491560	41.00	41.97	29.05
ZMAX	491561	38.00	42.12	29.67
ZMAX	491562	44.00	45.31	30.95
ZMAX	491563	39.00	42.12	29.67
ZMAX	491580	36.55	38.25	240.00
ZMAX	491600	39.73	42.59	159.15
ZMAX	491620	45.57	47.10	27.02
ZMAX	491621	48.00	50.63	27.65
ZMAX	490232	44.00	46.68	15.08
ZMAX	490431	41.00	44.60	26.55
ZMAX	490449	41.00	43.73	16.33
ZMAX	490457	39.00	40.79	18.67
ZMAX	490491	47.00	50.31	219.30
ZMAX	490492	47.00	51.03	17.72
ZMAX	490501	46.00	49.01	13.98
ZMAX	490511	48.00	50.60	28.05
ZMAX	490561	57.00	58.80	27.85
ZMAX	490581	44.00	46.11	14.50
ZMAX	490582	50.00	52.16	14.25
ZMAX	490584	50.00	52.32	25.10
ZMAX	490587	53.00	57.25	14.03
ZMAX	490701	54.00	58.71	15.35
ZMAX	490702	57.00	60.53	15.67
ZMAX	490703	53.74	55.40	14.15
ZMAX	490704	56.00	60.69	13.47
ZMAX	490713	52.00	54.37	19.92
ZMAX	490741	58.00	59.18	28.28
ZMAX	490762	56.00	59.03	25.53
ZMAX	490781	58.00	62.09	17.28
ZMAX	491274	31.22	39.06	14.17
ZMAX	491284	33.92	36.96	14.38
ZMAX	491389	39.00	40.60	20.42
ZMAX	491700	23.00	27.53	20.18
ZMAX	491701	9.70	25.35	29.83
ZMAX	491702	55.00	57.51	32.57
ZMAX	491703	25.00	27.50	15.93
ZMAX	491704	56.00	58.78	15.47
ZMAX	491705	55.80	57.51	32.57
ZMAX	491706	48.90	51.94	27.80
ZMAX	491707	45.00	46.96	30.25
ZMAX	491708	36.00	38.59	24.65
ZMAX	491709	37.00	39.24	15.80
ZMAX	491710	27.00	28.89	15.88
ZMAX	491711	24.00	26.41	25.53
ZMAX	491712	30.33	34.47	29.73
ZMAX	491713	30.00	34.07	62.55
ZMAX	491714	31.00	32.38	17.52
ZMAX	491715	40.17	42.50	36.25
ZMAX	491716	30.00	34.88	25.02
ZMAX	491717	52.00	55.24	16.38

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ZMAX	491718	34.00	36.55	14.83
ZMAX	491719	42.00	46.66	28.32
ZMAX	491720	38.00	40.61	15.87
ZMAX	491721	38.00	40.53	25.87
ZMAX	491722	39.00	39.92	17.15
ZMAX	491723	29.00	37.81	56.38
ZMAX	491724	29.00	34.88	24.98
ZMAX	491725	33.00	34.40	16.27
ZMAX	491728	30.00	35.21	15.82
ZMAX	491729	27.00	31.35	24.37
ZMAX	491730	26.00	29.87	18.22
ZMAX	491737	38.00	38.64	15.87
ZMAX	491740	37.00	38.62	15.67
ZMAX	491745	37.00	39.14	17.67
ZMAX	491746	37.00	39.08	26.35
ZMAX	491750	44.00	46.32	27.67
ZMAX	491753	49.00	51.45	21.95
ZMAX	490574	41.77	46.00	16.02
ZMAX	491405	42.00	44.60	17.08
ZMAX	490714	52.00	54.56	16.50
ZMAX	490753	51.00	54.46	29.98
ZMAX	491224	39.00	42.78	28.87
ZMAX	491225	41.50	43.96	14.92
ZMAX	491759	39.00	40.68	22.40
ZMAX	491760	39.00	40.61	22.92
ZMAX	491764	38.00	40.38	24.43
ZMAX	491768	38.00	40.29	24.43
ZMAX	499999	35.85	40.24	24.52
ZMAX	499998	35.80	40.22	24.47
ZMAX	499997	35.00	36.00	24.47
ZMAX	491002	30.84	34.07	65.40
ZMAX	491001	28.00	34.07	63.03
ZMAX	100000	99.00	99.00	0.00
ZMAX	100001	99.00	99.00	0.00
ZMAX	100002	99.00	99.00	0.00
ZMAX	100003	99.00	99.00	0.00
ZMAX	100004	99.00	99.00	0.00
ZMAX	100005	99.00	99.00	0.00
ZMAX	100006	99.00	99.00	0.00
ZMAX	100007	99.00	99.00	0.00
ZMAX	100008	99.00	99.00	0.00
ZMAX	100009	99.00	99.00	0.00
ZMAX	100010	99.00	99.00	0.00
ZMAX	100011	99.00	99.00	0.00
ZMAX	100012	99.00	99.00	0.00
ZMAX	100013	99.00	99.00	0.00
ZMAX	100014	99.00	99.00	0.00
ZMAX	100015	99.00	99.00	0.00
ZMAX	100016	99.00	99.00	0.00
ZMAX	100017	99.00	99.00	0.00
ZMAX	100018	99.00	99.00	0.00
ZMAX	100019	99.00	99.00	0.00
ZMAX	100020	99.00	99.00	0.00
ZMAX	100021	99.00	99.00	0.00
ZMAX	100022	99.00	99.00	0.00
ZMAX	100023	99.00	99.00	0.00
ZMAX	100024	99.00	99.00	0.00
ZMAX	100025	99.00	99.00	0.00
ZMAX	100026	99.00	99.00	0.00
ZMAX	100027	99.00	99.00	0.00
ZMAX	100028	99.00	99.00	0.00
ZMAX	100029	99.00	99.00	0.00
ZMAX	100030	99.00	99.00	0.00
ZMAX	100031	99.00	99.00	0.00
ZMAX	100032	99.00	99.00	0.00
ZMAX	100033	99.00	99.00	0.00
ZMAX	100034	99.00	99.00	0.00

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ZMAX	100035	99.00	99.00	0.00
ZMAX	100036	99.00	99.00	0.00
ZMAX	100037	99.00	99.00	0.00
ZMAX	100038	99.00	99.00	0.00
ZMAX	100039	99.00	99.00	0.00
ZMAX	100040	99.00	99.00	0.00
ZMAX	493010	17.00	23.49	25.48
ZMAX	493020	20.00	23.04	18.10
ZMAX	493030	18.00	24.47	13.05
ZMAX	493040	17.00	22.33	17.12
ZMAX	493060	21.00	21.50	13.27
ZMAX	493070	19.00	26.94	13.57
ZMAX	493090	18.00	23.45	25.08
ZMAX	493100	20.00	21.15	12.67
ZMAX	493110	18.00	20.02	12.90
ZMAX	493120	18.00	19.99	0.00
ZMAX	493130	17.00	20.16	12.70
ZMAX	493140	16.00	18.79	13.38
ZMAX	493150	16.00	19.40	13.03
ZMAX	493180	18.00	24.21	14.08
ZMAX	493185	19.00	24.19	14.08
ZMAX	493190	17.00	19.35	12.98
ZMAX	493195	17.00	20.16	13.05
ZMAX	493200	18.00	19.95	46.25
ZMAX	493210	18.00	19.27	12.98
ZMAX	493215	19.00	21.01	20.03
ZMAX	493220	16.00	19.14	13.10
ZMAX	493230	15.50	18.79	13.38
ZMAX	493240	16.00	19.33	27.43
ZMAX	493250	17.00	24.21	14.08
ZMAX	493260	21.00	24.19	13.65
ZMAX	493270	19.00	24.18	13.65
ZMAX	493280	19.00	23.09	13.00
ZMAX	493290	19.00	22.29	13.02
ZMAX	493310	17.00	23.77	45.67
ZMAX	493320	17.00	19.95	46.25
ZMAX	493330	17.00	19.87	13.47
ZMAX	493340	16.33	19.90	46.27
ZMAX	493350	15.50	17.76	13.03
ZMAX	493360	13.00	18.00	0.00
ZMAX	493370	14.61	18.28	13.85
ZMAX	493380	14.50	17.52	14.83
ZMAX	493390	14.50	18.09	13.43
ZMAX	493400	13.50	17.53	14.80
ZMAX	493410	12.50	17.52	14.82
ZMAX	493420	13.50	16.29	0.03
ZMAX	493430	12.44	15.97	0.08
ZMAX	493440	15.50	19.33	27.43
ZMAX	493450	18.00	19.05	14.57
ZMAX	493470	16.00	19.05	14.58
ZMAX	493480	15.50	19.07	14.57
ZMAX	493500	12.27	17.00	14.35
ZMAX	493505	12.27	16.90	16.73
ZMAX	493520	11.76	14.97	15.90
ZMAX	493525	11.00	14.88	15.78
ZMAX	493530	14.50	17.29	13.67
ZMAX	493535	15.00	17.29	13.67
ZMAX	493540	13.50	15.99	0.00
ZMAX	493545	9.65	14.82	15.73
ZMAX	493550	14.50	15.24	12.67
ZMAX	493555	13.50	14.88	13.63
ZMAX	494010	24.80	26.00	0.00
ZMAX	494020	22.90	25.59	12.67
ZMAX	494025	20.00	21.25	12.73
ZMAX	494030	22.00	22.74	13.00
ZMAX	494040	19.00	20.56	13.03
ZMAX	494045	18.70	20.56	13.03

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ZMAX	494050	20.00	25.00	0.00
ZMAX	494060	25.00	26.00	0.00
ZMAX	494070	18.00	19.88	13.68
ZMAX	494072	19.00	22.07	13.53
ZMAX	494074	20.00	21.08	12.73
ZMAX	494076	19.00	21.08	12.72
ZMAX	494078	21.00	22.18	12.73
ZMAX	494080	18.00	20.17	12.83
ZMAX	494100	17.00	19.08	15.12
ZMAX	494110	15.29	17.66	14.93
ZMAX	494120	18.00	19.32	13.43
ZMAX	494130	17.00	18.47	14.57
ZMAX	494140	14.50	18.46	14.60
ZMAX	494150	15.00	17.66	14.92
ZMAX	494170	18.00	19.89	13.65
ZMAX	494180	17.00	19.64	14.57
ZMAX	494185	17.00	19.77	13.73
ZMAX	494190	17.00	18.71	13.80
ZMAX	494200	15.00	16.97	0.03
ZMAX	494205	17.00	19.05	12.60
ZMAX	494210	14.87	18.80	0.00
ZMAX	494220	15.75	18.22	0.02
ZMAX	494230	16.00	18.12	14.12
ZMAX	494240	15.71	18.39	13.38
ZMAX	494250	16.70	17.98	0.00
ZMAX	495010	20.00	23.23	12.52
ZMAX	495020	15.50	19.33	27.43
ZMAX	495030	15.50	19.33	27.43
ZMAX	495035	19.00	21.09	24.97
ZMAX	495038	17.00	18.17	12.78
ZMAX	495040	16.00	18.70	12.88
ZMAX	495045	15.00	15.88	12.68
ZMAX	495050	15.50	18.89	24.92
ZMAX	495055	15.50	16.83	12.57
ZMAX	495060	14.80	15.87	12.70
ZMAX	495065	14.50	16.26	12.57
ZMAX	495070	11.50	13.92	17.83
ZMAX	495075	11.50	13.53	22.37
ZMAX	495080	13.18	13.99	0.00
ZMAX	495085	13.00	15.04	17.12
ZMAX	495090	11.42	13.57	21.77
ZMAX	495100	15.00	18.47	14.75
ZMAX	495110	14.50	17.09	12.50
ZMAX	495120	13.00	14.23	12.92
ZMAX	495125	14.42	16.27	14.58
ZMAX	495140	14.50	16.81	26.47
ZMAX	495145	14.50	16.81	26.47
ZMAX	495150	13.00	14.24	12.92
ZMAX	495152	12.50	16.09	25.52
ZMAX	495154	12.50	16.02	19.38
ZMAX	495155	12.50	16.02	19.38
ZMAX	495156	12.50	13.49	0.00
ZMAX	495160	12.50	16.03	24.87
ZMAX	495162	13.50	15.57	25.52
ZMAX	495165	13.50	16.01	17.57
ZMAX	495170	12.50	15.75	13.55
ZMAX	495180	10.45	12.87	23.30
ZMAX	495210	12.50	14.68	25.08
ZMAX	495215	12.50	14.23	12.93
ZMAX	495230	8.82	12.33	13.10
ZMAX	495235	10.50	13.88	24.82
ZMAX	495240	8.50	10.69	24.65
ZMAX	495260	13.00	16.05	24.57
ZMAX	495270	12.50	14.22	12.93
ZMAX	495275	11.50	13.22	12.92
ZMAX	495280	10.90	11.27	12.97
ZMAX	495300	13.94	15.71	13.67

ALTERNATIVE 5 25-YEAR 24-HOUR

ZMAX	495302	13.90	15.67	13.55
ZMAX	495304	13.31	15.60	13.22
ZMAX	495306	12.73	14.39	13.88
ZMAX	495308	12.18	14.26	14.23
ZMAX	495310	11.49	13.56	21.88
ZMAX	495312	10.92	13.55	22.00
ZMAX	495314	10.43	13.55	22.23
ZMAX	495316	11.80	14.15	12.53
ZMAX	495320	9.75	13.55	22.22
ZMAX	495322	9.64	14.74	15.77
ZMAX	495324	9.44	14.48	16.05
ZMAX	495326	9.30	14.05	17.23
ZMAX	495328	9.43	13.92	17.82
ZMAX	495330	9.20	13.92	17.83
ZMAX	495332	9.02	13.92	17.80
ZMAX	495334	8.90	13.70	20.10
ZMAX	495336	8.72	13.54	22.25
ZMAX	495338	8.53	13.53	22.37
ZMAX	495340	8.40	13.52	22.37
ZMAX	495342	8.23	13.51	22.47
ZMAX	495344	8.04	13.36	22.80
ZMAX	495346	7.85	13.23	23.03
ZMAX	495348	7.66	12.87	23.30
ZMAX	495350	7.47	11.39	23.85
ZMAX	495352	7.34	10.71	24.63
ZMAX	495354	7.26	9.99	24.62
ZMAX	495356	7.19	10.60	24.67
ZMAX	496010	14.50	16.27	14.60
ZMAX	496020	14.50	18.79	0.00
ZMAX	496030	14.50	16.32	0.02
ZMAX	496060	16.60	16.77	12.83
ZMAX	496065	14.00	16.28	0.10
ZMAX	496070	14.00	16.25	0.10
ZMAX	496080	14.20	17.99	0.00
ZMAX	496090	14.00	17.99	0.00
ZMAX	496100	12.50	15.91	0.07
ZMAX	496110	11.00	15.73	14.87
ZMAX	496120	13.00	15.31	13.30
ZMAX	496125	12.00	15.18	20.48
ZMAX	496130	13.00	15.61	14.93
ZMAX	496150	14.00	15.69	14.90
ZMAX	496160	11.00	15.18	20.48
ZMAX	496170	12.00	15.72	14.88
ZMAX	496175	12.00	14.94	14.92
ZMAX	496180	11.00	13.28	13.00
ZMAX	496190	11.00	13.27	13.00
ZMAX	496200	10.50	11.93	15.67
ZMAX	496232	16.00	18.00	0.00
ZMAX	496234	14.00	16.36	0.15
ZMAX	496235	15.00	15.41	0.12
ZMAX	496240	14.28	15.85	0.03
ZMAX	496245	13.50	15.22	13.67
ZMAX	496260	13.50	15.17	13.67
ZMAX	496270	12.50	13.85	13.57
ZMAX	496280	9.50	12.33	13.90
ZMAX	496310	10.50	11.92	15.68
ZMAX	496320	10.50	11.90	15.72
ZMAX	496340	4.43	11.88	15.70
ZMAX	496350	8.50	10.59	25.02
ZMAX	496360	7.50	9.08	13.68
ZMAX	496370	6.50	8.65	17.42
ZMAX	496380	5.50	8.65	17.42
ZMAX	496390	4.41	8.72	17.23
ZMAX	496395	4.50	8.46	17.88
ZMAX	496400	6.50	8.64	17.40
ZMAX	496410	-0.65	8.46	17.87
ZMAX	496420	3.50	8.18	18.92

ALTERNATIVE 5 25-YEAR 24-HOUR

ZMAX	496430	5.50	9.18	12.98
ZMAX	496440	5.50	8.25	19.20
ZMAX	496450	3.50	8.25	19.18
ZMAX	496460	5.50	10.10	14.18
ZMAX	496470	3.00	8.25	19.18
ZMAX	496480	6.50	10.06	15.08
ZMAX	496485	7.50	11.00	16.52
ZMAX	496490	3.50	9.02	20.33
ZMAX	496500	6.50	11.00	0.00
ZMAX	496510	4.50	8.50	240.00
ZMAX	496515	4.50	8.24	19.20
ZMAX	496520	5.50	8.24	19.18
ZMAX	496530	5.50	8.24	19.22
ZMAX	496540	6.50	8.24	19.18
ZMAX	496545	4.00	8.24	19.20
ZMAX	496550	4.00	8.24	19.18
ZMAX	496560	3.00	8.25	19.17
ZMAX	496570	5.50	8.23	19.18
ZMAX	496580	7.50	11.01	13.97
ZMAX	496590	4.50	8.46	17.87
ZMAX	496600	-1.88	8.25	19.10
ZMAX	496610	4.50	8.15	19.05
ZMAX	496620	4.50	8.13	19.03
ZMAX	497010	11.00	13.93	13.30
ZMAX	497020	3.50	10.44	24.82
ZMAX	497025	8.50	11.15	12.73
ZMAX	497035	6.50	10.48	13.15
ZMAX	497045	4.50	8.01	13.30
ZMAX	497050	3.50	8.00	13.30
ZMAX	497055	3.50	6.81	21.10
ZMAX	497065	1.88	6.81	21.08
ZMAX	497070	8.50	10.07	12.88
ZMAX	497080	2.06	7.04	19.60
ZMAX	497085	6.50	10.26	24.88
ZMAX	497086	6.32	10.64	24.67
ZMAX	497088	5.89	10.44	24.82
ZMAX	497090	4.32	10.31	24.88
ZMAX	497092	3.75	9.89	24.97
ZMAX	497094	2.75	9.44	25.00
ZMAX	497096	2.30	8.71	25.02
ZMAX	497098	1.85	8.49	25.03
ZMAX	497100	-0.16	7.35	19.83
ZMAX	497102	-1.57	7.24	19.75
ZMAX	497104	-2.19	7.19	19.72
ZMAX	497105	-1.00	7.18	19.72
ZMAX	497106	-1.37	7.02	19.57
ZMAX	497107	-2.07	7.02	19.55
ZMAX	497108	-0.37	7.00	19.55
ZMAX	497109	-4.75	7.01	19.55
ZMAX	497111	-3.66	7.01	19.55
ZMAX	497112	-3.66	6.92	19.55
ZMAX	497113	-5.33	6.81	19.55
ZMAX	497110	-0.19	8.27	18.72
ZMAX	497120	1.50	7.02	19.57
ZMAX	497122	4.50	7.02	19.57
ZMAX	497124	4.00	7.02	19.57
ZMAX	497130	-0.21	8.13	18.05
ZMAX	497140	4.00	7.04	19.60
ZMAX	497150	5.40	7.01	19.55
ZMAX	497160	-1.85	8.12	18.98
ZMAX	497161	-2.25	7.84	19.15
ZMAX	497162	-2.86	7.28	19.45
ZMAX	497170	-6.19	4.14	19.60
ZMAX	500010	6.94	11.25	12.75
ZMAX	500020	8.41	10.31	14.25
ZMAX	500025	6.13	11.05	12.97
ZMAX	500030	5.77	11.04	12.97

ALTERNATIVE 5 25-YEAR 24-HOUR

ZMAX	500040	5.07	10.55	13.05
ZMAX	500050	4.00	8.91	13.03
ZMAX	500110	7.43	11.26	12.82
ZMAX	500120	6.16	10.31	24.88
ZMAX	500130	8.00	11.88	13.55
ZMAX	500140	6.39	10.31	24.93
ZMAX	500210	4.00	10.39	13.80
ZMAX	500220	6.91	11.27	12.73
ZMAX	500300	5.00	10.08	12.68
ZMAX	9498000	-6.69	2.96	0.00
ZMAX	9496630	12.00	12.00	0.00
ZMAX	9493020	20.00	20.00	0.00
ZMAX	9493060	22.50	22.50	0.00
ZMAX	9493190	19.00	19.00	0.00
ZMAX	9493140	19.98	19.98	0.00
ZMAX	9493150	19.70	19.70	0.00
ZMAX	9493240	19.00	19.00	0.00
ZMAX	9495030	17.48	17.48	0.00
ZMAX	9495010	23.20	23.20	0.00
ZMAX	9495085	15.10	15.10	0.00
ZMAX	9495140	16.00	16.00	0.00
ZMAX	9495145	16.00	16.00	0.00
ZMAX	9495160	15.50	15.50	0.00
ZMAX	9496320	11.00	11.00	0.00
ZMAX	9496260	14.00	14.00	0.00
ZMAX	9494250	18.00	18.00	0.00
ZMAX	9494190	18.50	18.50	0.00
ZMAX	100043	99.00	99.00	0.00
ZMAX	100044	99.00	99.00	0.00
ZMAX	100045	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100047	99.00	99.00	0.00
ZMAX	100048	99.00	99.00	0.00
ZMAX	100049	99.00	99.00	0.00
ZMAX	100050	99.00	99.00	0.00
ZMAX	100051	99.00	99.00	0.00
ZMAX	100052	99.00	99.00	0.00
ZMAX	100053	99.00	99.00	0.00
ZMAX	100054	99.00	99.00	0.00
ZMAX	100055	99.00	99.00	0.00
ZMAX	100056	99.00	99.00	0.00
ZMAX	100057	99.00	99.00	0.00
ZMAX	100058	99.00	99.00	0.00
ZMAX	100059	99.00	99.00	0.00
ZMAX	100060	99.00	99.00	0.00
ZMAX	100061	99.00	99.00	0.00
ZMAX	100062	99.00	99.00	0.00
ZMAX	100063	99.00	99.00	0.00
ZMAX	100064	99.00	99.00	0.00
ZMAX	100065	99.00	99.00	0.00
ZMAX	100066	99.00	99.00	0.00
ZMAX	100067	99.00	99.00	0.00
ZMAX	100068	99.00	99.00	0.00
ZMAX	100069	99.00	99.00	0.00
ZMAX	100070	99.00	99.00	0.00
ZMAX	100071	99.00	99.00	0.00
ZMAX	100072	99.00	99.00	0.00
ZMAX	100073	99.00	99.00	0.00
ZMAX	100074	99.00	99.00	0.00
ZMAX	100075	99.00	99.00	0.00
ZMAX	100076	99.00	99.00	0.00
ZMAX	100077	99.00	99.00	0.00
ZMAX	100078	99.00	99.00	0.00
ZMAX	100079	99.00	99.00	0.00
ZMAX	100080	99.00	99.00	0.00
ZMAX	100081	99.00	99.00	0.00

ALTERNATIVE 5 25-YEAR 24-HOUR

ZMAX	100082	99.00	99.00	0.00
ZMAX	100083	99.00	99.00	0.00
ZMAX	100084	99.00	99.00	0.00
ZMAX	100085	99.00	99.00	0.00
ZMAX	100086	99.00	99.00	0.00
ZMAX	100087	99.00	99.00	0.00
ZMAX	100088	99.00	99.00	0.00
ZMAX	100089	99.00	99.00	0.00
ZMAX	9498100	-6.69	3.75	239.98

Alternative 6 Borrow Pit

ALTERNATIVE 6 5-YEAR 24-HOUR

	JUNC ID	INVT	Z_MAX	T_MAX
ZMAX	490000	24.23	26.46	0.00
ZMAX	490004	26.46	27.06	13.98
ZMAX	490002	20.93	25.72	16.48
ZMAX	490008	27.00	28.09	29.87
ZMAX	490010	26.16	28.19	39.67
ZMAX	490020	24.36	28.20	26.73
ZMAX	490030	26.46	28.14	25.25
ZMAX	490040	29.00	29.90	26.57
ZMAX	490050	25.16	28.39	15.43
ZMAX	490070	25.96	26.96	31.07
ZMAX	490071	29.00	29.91	14.60
ZMAX	490072	27.00	28.02	27.30
ZMAX	490073	30.00	32.31	14.45
ZMAX	490080	27.66	32.26	240.00
ZMAX	490090	28.00	32.42	240.00
ZMAX	490100	29.00	29.69	14.10
ZMAX	490110	26.16	29.59	24.02
ZMAX	490120	30.64	33.01	69.27
ZMAX	490130	28.96	33.02	69.23
ZMAX	490140	29.26	31.53	240.00
ZMAX	490141	31.00	32.13	26.37
ZMAX	490150	29.89	33.27	67.15
ZMAX	490160	29.77	34.52	59.60
ZMAX	490170	35.00	38.56	26.23
ZMAX	490180	32.66	37.49	26.72
ZMAX	490181	33.75	37.49	26.82
ZMAX	490200	36.66	38.56	26.23
ZMAX	490210	36.29	38.35	0.00
ZMAX	490211	39.00	40.60	17.20
ZMAX	490220	40.04	42.02	15.35
ZMAX	490221	42.00	44.50	30.53
ZMAX	490230	39.95	40.97	25.65
ZMAX	490240	26.36	30.25	23.53
ZMAX	490250	29.00	32.36	21.48
ZMAX	490251	33.00	34.78	29.83
ZMAX	490260	31.16	33.28	16.17
ZMAX	490261	34.00	36.08	13.83
ZMAX	490263	34.00	35.25	28.05
ZMAX	490264	33.00	34.83	24.37
ZMAX	490266	34.00	35.80	16.42
ZMAX	490270	35.00	37.74	14.40
ZMAX	490280	32.70	34.78	29.83
ZMAX	490281	32.70	34.78	29.75
ZMAX	490290	31.00	34.39	16.30
ZMAX	490300	31.86	33.17	13.50
ZMAX	490310	33.00	36.26	18.32
ZMAX	490320	34.00	37.76	20.60
ZMAX	490321	36.00	38.24	37.90
ZMAX	490330	37.00	38.66	27.77
ZMAX	490340	35.00	37.83	14.20
ZMAX	490350	36.00	38.67	25.85
ZMAX	490370	33.96	35.92	25.73
ZMAX	490375	35.00	38.08	57.12
ZMAX	490390	34.56	37.97	24.93
ZMAX	490391	36.80	37.26	26.05
ZMAX	490392	36.40	36.82	15.00
ZMAX	490400	37.00	38.89	25.85
ZMAX	490401	37.00	39.37	25.98
ZMAX	490410	35.46	38.08	57.08
ZMAX	490411	36.00	38.08	57.08
ZMAX	490420	35.00	40.20	50.95
ZMAX	490421	39.00	39.74	28.53
ZMAX	490422	39.00	41.05	25.17
ZMAX	490425	38.00	40.20	51.63
ZMAX	490430	35.47	40.69	26.00
ZMAX	490440	40.00	42.84	26.75

ALTERNATIVE 6 5-YEAR 24-HOUR

ZMAX	490450	39.00	40.58	57.92
ZMAX	490451	39.00	40.14	29.65
ZMAX	490453	39.00	40.14	31.75
ZMAX	490455	39.00	40.60	21.83
ZMAX	490460	43.00	45.73	27.53
ZMAX	490470	40.00	41.74	25.50
ZMAX	490480	39.67	42.00	0.00
ZMAX	490490	40.38	42.30	19.83
ZMAX	490500	41.00	44.61	59.72
ZMAX	490510	49.00	50.73	17.83
ZMAX	490520	43.47	48.11	27.60
ZMAX	490530	51.00	54.16	83.12
ZMAX	490535	56.47	57.94	16.12
ZMAX	490540	56.00	58.17	16.05
ZMAX	490550	48.00	49.28	17.52
ZMAX	490555	48.07	51.02	13.92
ZMAX	490560	49.00	49.74	16.27
ZMAX	490580	35.47	40.81	25.98
ZMAX	490590	48.37	49.31	26.27
ZMAX	490600	42.54	44.45	25.78
ZMAX	490610	39.77	41.38	27.08
ZMAX	490612	42.00	44.20	27.75
ZMAX	490620	41.70	42.88	16.80
ZMAX	490621	44.00	45.18	27.30
ZMAX	490630	42.17	44.53	20.53
ZMAX	490637	41.53	42.43	14.78
ZMAX	490638	44.12	44.50	24.82
ZMAX	490639	48.72	49.21	14.53
ZMAX	490640	37.57	40.86	25.35
ZMAX	490641	44.00	46.73	24.48
ZMAX	490642	45.16	47.24	16.32
ZMAX	490643	39.87	44.93	16.70
ZMAX	490644	47.67	49.21	14.60
ZMAX	490645	48.67	51.27	24.60
ZMAX	490646	41.53	47.31	14.48
ZMAX	490650	43.27	45.09	19.27
ZMAX	490651	48.16	50.18	16.65
ZMAX	490652	43.47	46.22	13.98
ZMAX	490654	46.00	48.13	26.82
ZMAX	490655	46.55	48.83	14.98
ZMAX	490659	45.57	48.11	14.32
ZMAX	490660	39.87	46.11	14.37
ZMAX	490661	45.57	49.72	16.63
ZMAX	490670	45.37	48.30	14.27
ZMAX	490675	41.87	48.11	14.30
ZMAX	490680	47.11	49.55	16.67
ZMAX	490690	45.49	48.39	14.18
ZMAX	490700	53.74	58.68	29.58
ZMAX	490710	47.96	52.09	27.78
ZMAX	490711	52.00	54.43	21.28
ZMAX	490720	50.00	52.14	27.97
ZMAX	490730	50.23	52.56	25.45
ZMAX	490740	49.64	53.25	17.57
ZMAX	490742	58.00	59.32	14.05
ZMAX	490743	48.76	53.27	18.00
ZMAX	490744	49.87	53.27	18.00
ZMAX	490745	57.00	59.15	29.72
ZMAX	490746	57.00	59.23	26.50
ZMAX	490750	51.30	53.51	16.03
ZMAX	490751	55.00	56.23	25.60
ZMAX	490760	50.95	53.93	20.07
ZMAX	490770	51.91	55.20	27.10
ZMAX	490771	55.00	56.06	25.68
ZMAX	490772	56.00	57.26	26.22
ZMAX	490773	56.00	58.54	25.82
ZMAX	490776	56.00	57.12	27.18
ZMAX	490779	55.00	57.10	24.95

ALTERNATIVE 6 5-YEAR 24-HOUR

ZMAX	490780	54.21	57.06	20.42
ZMAX	490790	53.17	55.16	41.82
ZMAX	490791	56.00	57.79	27.22
ZMAX	490792	56.00	57.63	26.03
ZMAX	490794	56.00	57.24	29.38
ZMAX	490795	56.00	56.98	27.40
ZMAX	490800	53.17	55.62	14.60
ZMAX	490801	55.00	57.11	25.08
ZMAX	490802	56.00	57.35	25.72
ZMAX	490803	57.00	57.89	28.22
ZMAX	490804	56.00	57.89	27.72
ZMAX	490900	53.67	55.16	41.90
ZMAX	491010	22.06	24.94	14.25
ZMAX	491019	26.44	27.43	17.70
ZMAX	491020	26.14	28.53	16.78
ZMAX	491021	26.00	28.54	17.08
ZMAX	491022	27.07	28.53	16.93
ZMAX	491040	23.16	25.04	14.20
ZMAX	491041	26.86	29.01	13.92
ZMAX	491042	27.66	28.61	16.12
ZMAX	491043	27.17	28.39	16.33
ZMAX	491044	27.66	28.94	13.97
ZMAX	491060	25.96	28.98	116.38
ZMAX	491080	25.66	29.01	116.38
ZMAX	491100	28.96	30.31	96.63
ZMAX	491102	29.00	31.08	13.28
ZMAX	491120	27.86	30.30	78.73
ZMAX	491121	29.25	32.22	42.45
ZMAX	491122	32.00	33.30	13.50
ZMAX	491123	32.00	33.51	17.65
ZMAX	491140	29.62	32.27	42.22
ZMAX	491160	30.66	32.57	17.13
ZMAX	491180	32.00	34.31	25.73
ZMAX	491200	34.46	36.56	14.65
ZMAX	491220	36.97	38.07	19.53
ZMAX	491221	33.05	36.27	14.00
ZMAX	491222	36.80	38.34	13.12
ZMAX	491223	34.39	36.28	13.98
ZMAX	491240	31.00	32.45	27.82
ZMAX	491260	29.00	31.14	86.48
ZMAX	491280	29.00	31.31	84.15
ZMAX	491285	30.77	38.29	14.47
ZMAX	491300	29.00	31.31	84.15
ZMAX	491302	33.00	36.22	18.52
ZMAX	491320	32.90	36.23	14.03
ZMAX	491340	29.17	31.70	35.60
ZMAX	491344	36.00	37.90	27.73
ZMAX	491342	31.36	34.00	14.92
ZMAX	491360	33.97	36.54	16.25
ZMAX	491380	31.36	35.21	17.23
ZMAX	491382	33.00	33.42	14.47
ZMAX	491384	30.00	32.09	26.75
ZMAX	491387	34.17	38.94	49.48
ZMAX	491388	34.17	40.79	26.65
ZMAX	491390	36.63	38.94	49.27
ZMAX	491391	35.17	38.97	49.27
ZMAX	491393	42.00	44.71	19.67
ZMAX	491394	36.67	40.02	17.42
ZMAX	491395	35.27	38.97	49.25
ZMAX	491396	38.00	40.30	27.32
ZMAX	491397	32.07	38.93	49.47
ZMAX	491398	42.00	44.02	41.60
ZMAX	491399	38.00	40.79	26.65
ZMAX	491400	33.27	35.12	13.50
ZMAX	491401	36.77	42.20	14.83
ZMAX	491402	32.17	38.94	49.30
ZMAX	491404	38.96	40.79	27.17

ALTERNATIVE 6 5-YEAR 24-HOUR

ZMAX	491406	36.77	40.02	17.37
ZMAX	491407	32.17	38.93	49.72
ZMAX	491392	43.00	47.25	27.48
ZMAX	491403	45.00	48.01	29.82
ZMAX	491440	38.17	39.66	27.67
ZMAX	491441	38.54	39.66	27.65
ZMAX	491460	30.71	35.80	24.70
ZMAX	491465	31.27	35.83	25.22
ZMAX	491480	33.87	36.50	13.55
ZMAX	491500	30.00	35.85	26.38
ZMAX	491501	31.17	35.84	26.03
ZMAX	491502	36.00	37.76	27.88
ZMAX	491520	38.15	40.01	13.38
ZMAX	491540	41.00	43.84	27.87
ZMAX	491541	42.00	45.46	27.55
ZMAX	491452	42.00	43.55	26.18
ZMAX	491453	37.18	39.41	13.48
ZMAX	491560	41.00	41.59	28.95
ZMAX	491561	38.00	41.35	29.92
ZMAX	491562	44.00	44.85	31.13
ZMAX	491563	39.00	41.35	29.92
ZMAX	491580	36.55	37.57	28.97
ZMAX	491600	39.73	41.37	240.00
ZMAX	491620	45.57	46.63	28.27
ZMAX	491621	48.00	50.20	27.60
ZMAX	490232	44.00	46.41	16.42
ZMAX	490431	41.00	44.07	26.53
ZMAX	490449	41.00	43.29	17.73
ZMAX	490457	39.00	40.61	22.20
ZMAX	490491	47.00	48.42	29.25
ZMAX	490492	47.00	50.25	29.27
ZMAX	490501	46.00	48.82	14.10
ZMAX	490511	48.00	49.65	28.08
ZMAX	490561	57.00	58.11	27.78
ZMAX	490581	44.00	45.94	15.03
ZMAX	490582	50.00	51.82	18.60
ZMAX	490584	50.00	51.51	26.03
ZMAX	490587	53.00	56.61	16.95
ZMAX	490701	54.00	58.55	20.10
ZMAX	490702	57.00	60.42	25.63
ZMAX	490703	53.74	55.00	14.12
ZMAX	490704	56.00	60.39	14.15
ZMAX	490713	52.00	53.82	29.12
ZMAX	490741	58.00	58.74	28.33
ZMAX	490762	56.00	58.18	27.28
ZMAX	490781	58.00	61.75	17.97
ZMAX	491274	31.22	38.40	14.72
ZMAX	491284	33.92	36.06	14.38
ZMAX	491389	39.00	40.35	27.20
ZMAX	491700	23.00	36.86	240.00
ZMAX	491701	17.00	36.90	240.00
ZMAX	491702	55.00	56.74	35.83
ZMAX	491703	25.00	36.89	240.00
ZMAX	491704	56.00	58.66	16.53
ZMAX	491705	55.80	56.74	35.83
ZMAX	491706	48.90	51.25	27.72
ZMAX	491707	45.00	46.40	30.12
ZMAX	491708	36.00	38.27	28.08
ZMAX	491709	37.00	39.09	16.23
ZMAX	491710	27.00	36.89	240.00
ZMAX	491712	30.33	33.33	29.95
ZMAX	491713	30.00	34.19	240.00
ZMAX	491714	31.00	36.81	240.00
ZMAX	491715	40.17	41.74	25.38
ZMAX	491716	30.00	34.36	28.57
ZMAX	491717	52.00	55.10	26.70
ZMAX	491718	34.00	36.81	240.00

ALTERNATIVE 6 5-YEAR 24-HOUR

ZMAX	491719	42.00	45.70	28.52
ZMAX	491720	38.00	40.31	16.47
ZMAX	491721	38.00	39.98	25.93
ZMAX	491722	39.00	39.57	16.95
ZMAX	491723	29.00	37.08	39.95
ZMAX	491724	29.00	34.36	28.88
ZMAX	491725	33.00	34.47	240.00
ZMAX	491728	30.00	36.89	240.00
ZMAX	491729	27.00	36.86	240.00
ZMAX	491730	26.00	36.82	240.00
ZMAX	491737	38.00	38.53	16.62
ZMAX	491740	37.00	38.49	16.32
ZMAX	491745	37.00	38.92	21.35
ZMAX	491746	37.00	38.72	28.12
ZMAX	491750	44.00	45.43	27.72
ZMAX	491753	49.00	50.77	29.85
ZMAX	490574	41.77	45.22	15.65
ZMAX	491405	42.00	44.34	28.37
ZMAX	490714	52.00	54.09	17.12
ZMAX	490753	51.00	53.78	28.50
ZMAX	491224	39.00	41.41	28.83
ZMAX	491225	41.50	43.41	14.97
ZMAX	491759	39.00	40.31	21.92
ZMAX	491760	39.00	40.27	22.13
ZMAX	491764	38.00	40.00	20.45
ZMAX	491768	38.00	39.63	22.73
ZMAX	499999	35.85	39.59	22.75
ZMAX	499998	35.80	39.58	22.72
ZMAX	499997	35.00	35.80	22.72
ZMAX	491002	30.84	34.19	240.00
ZMAX	491001	28.00	34.19	240.00
ZMAX	100000	99.00	99.00	0.00
ZMAX	100001	99.00	99.00	0.00
ZMAX	100002	99.00	99.00	0.00
ZMAX	100003	99.00	99.00	0.00
ZMAX	100004	99.00	99.00	0.00
ZMAX	100005	99.00	99.00	0.00
ZMAX	100006	99.00	99.00	0.00
ZMAX	100007	99.00	99.00	0.00
ZMAX	100008	99.00	99.00	0.00
ZMAX	100009	99.00	99.00	0.00
ZMAX	100010	99.00	99.00	0.00
ZMAX	100011	99.00	99.00	0.00
ZMAX	100012	99.00	99.00	0.00
ZMAX	100013	99.00	99.00	0.00
ZMAX	100014	99.00	99.00	0.00
ZMAX	100015	99.00	99.00	0.00
ZMAX	100016	99.00	99.00	0.00
ZMAX	100017	99.00	99.00	0.00
ZMAX	100018	99.00	99.00	0.00
ZMAX	100019	99.00	99.00	0.00
ZMAX	100020	99.00	99.00	0.00
ZMAX	100021	99.00	99.00	0.00
ZMAX	100022	99.00	99.00	0.00
ZMAX	100023	99.00	99.00	0.00
ZMAX	100024	99.00	99.00	0.00
ZMAX	100025	99.00	99.00	0.00
ZMAX	100026	99.00	99.00	0.00
ZMAX	100027	99.00	99.00	0.00
ZMAX	100028	99.00	99.00	0.00
ZMAX	100029	99.00	99.00	0.00
ZMAX	100030	99.00	99.00	0.00
ZMAX	100031	99.00	99.00	0.00
ZMAX	100032	99.00	99.00	0.00
ZMAX	100033	99.00	99.00	0.00
ZMAX	100034	99.00	99.00	0.00
ZMAX	100035	99.00	99.00	0.00

ALTERNATIVE 6 5-YEAR 24-HOUR

ZMAX	100036	99.00	99.00	0.00
ZMAX	100037	99.00	99.00	0.00
ZMAX	100038	99.00	99.00	0.00
ZMAX	100039	99.00	99.00	0.00
ZMAX	100040	99.00	99.00	0.00
ZMAX	493010	17.00	22.66	25.45
ZMAX	493020	20.00	22.62	27.23
ZMAX	493030	18.00	24.41	13.30
ZMAX	493040	17.00	22.11	21.47
ZMAX	493060	21.00	21.45	13.35
ZMAX	493070	19.00	25.64	13.65
ZMAX	493090	18.00	22.29	25.08
ZMAX	493100	20.00	21.11	12.67
ZMAX	493110	18.00	19.93	12.95
ZMAX	493120	18.00	19.99	0.00
ZMAX	493130	17.00	20.08	13.00
ZMAX	493140	16.00	18.43	13.70
ZMAX	493150	16.00	19.33	13.83
ZMAX	493180	18.00	24.10	14.72
ZMAX	493185	19.00	23.64	19.18
ZMAX	493190	17.00	19.21	13.03
ZMAX	493195	17.00	20.06	13.65
ZMAX	493200	18.00	19.64	14.02
ZMAX	493210	18.00	19.18	13.03
ZMAX	493215	19.00	20.75	25.27
ZMAX	493220	16.00	18.96	13.32
ZMAX	493230	15.50	18.43	13.70
ZMAX	493240	16.00	19.06	14.82
ZMAX	493250	17.00	24.10	14.72
ZMAX	493260	21.00	24.09	14.77
ZMAX	493270	19.00	24.08	14.77
ZMAX	493280	19.00	23.06	13.03
ZMAX	493290	19.00	22.23	15.38
ZMAX	493310	17.00	21.50	16.30
ZMAX	493320	17.00	19.80	0.00
ZMAX	493330	17.00	19.63	14.03
ZMAX	493340	16.33	19.62	14.02
ZMAX	493350	15.50	17.69	13.17
ZMAX	493360	13.00	18.00	0.00
ZMAX	493370	14.61	17.75	13.97
ZMAX	493380	14.50	17.08	17.00
ZMAX	493390	14.50	17.86	13.77
ZMAX	493400	13.50	17.08	16.98
ZMAX	493410	12.50	17.08	16.98
ZMAX	493420	13.50	16.29	0.03
ZMAX	493430	12.44	15.97	0.08
ZMAX	493440	15.50	18.71	45.28
ZMAX	493450	18.00	18.84	15.00
ZMAX	493470	16.00	18.84	15.02
ZMAX	493480	15.50	18.84	15.02
ZMAX	493500	12.27	16.79	14.65
ZMAX	493505	12.27	16.26	17.22
ZMAX	493520	11.76	14.57	17.08
ZMAX	493525	11.00	14.46	16.90
ZMAX	493530	14.50	17.13	16.60
ZMAX	493535	15.00	17.13	16.60
ZMAX	493540	13.50	15.99	0.00
ZMAX	493545	9.65	14.41	16.95
ZMAX	493550	14.50	15.20	12.70
ZMAX	493555	13.50	14.81	12.50
ZMAX	494010	24.80	26.00	0.00
ZMAX	494020	22.90	25.55	12.93
ZMAX	494025	20.00	21.16	12.95
ZMAX	494030	22.00	22.69	13.00
ZMAX	494040	19.00	20.45	13.07
ZMAX	494045	18.70	20.44	13.07
ZMAX	494050	20.00	25.00	0.00

ALTERNATIVE 6 5-YEAR 24-HOUR

ZMAX	494060	25.00	26.00	0.00
ZMAX	494070	18.00	19.71	13.70
ZMAX	494072	19.00	22.01	24.17
ZMAX	494074	20.00	21.05	13.12
ZMAX	494076	19.00	21.05	12.68
ZMAX	494078	21.00	22.12	12.85
ZMAX	494080	18.00	20.11	13.10
ZMAX	494100	17.00	19.06	15.18
ZMAX	494110	15.29	16.78	12.70
ZMAX	494120	18.00	19.22	13.35
ZMAX	494130	17.00	18.20	14.83
ZMAX	494140	14.50	18.19	14.85
ZMAX	494150	15.00	16.99	0.00
ZMAX	494170	18.00	19.72	13.67
ZMAX	494180	17.00	19.60	15.65
ZMAX	494185	17.00	19.56	13.80
ZMAX	494190	17.00	18.34	13.85
ZMAX	494200	15.00	16.97	0.03
ZMAX	494205	17.00	18.99	15.12
ZMAX	494210	14.87	18.80	0.00
ZMAX	494220	15.75	18.22	0.02
ZMAX	494230	16.00	18.09	0.03
ZMAX	494240	15.71	18.22	13.45
ZMAX	494250	16.70	17.98	0.00
ZMAX	495010	20.00	23.20	0.00
ZMAX	495020	15.50	18.71	28.10
ZMAX	495030	15.50	18.71	28.10
ZMAX	495035	19.00	20.34	24.98
ZMAX	495038	17.00	18.10	12.90
ZMAX	495040	16.00	18.63	12.92
ZMAX	495045	15.00	15.77	12.73
ZMAX	495050	15.50	18.34	24.92
ZMAX	495055	15.50	16.79	12.95
ZMAX	495060	14.80	15.76	12.73
ZMAX	495065	14.50	16.15	13.05
ZMAX	495070	11.50	13.33	21.18
ZMAX	495075	11.50	12.91	25.72
ZMAX	495080	13.18	13.99	0.00
ZMAX	495085	13.00	15.02	20.35
ZMAX	495090	11.42	12.99	14.20
ZMAX	495100	15.00	18.15	16.60
ZMAX	495110	14.50	17.04	12.75
ZMAX	495120	13.00	14.12	13.35
ZMAX	495125	14.42	15.96	14.05
ZMAX	495140	14.50	16.55	17.73
ZMAX	495145	14.50	16.39	240.00
ZMAX	495150	13.00	14.12	13.35
ZMAX	495152	12.50	15.08	25.55
ZMAX	495154	12.50	15.43	25.97
ZMAX	495155	12.50	15.43	25.97
ZMAX	495156	12.50	13.49	0.00
ZMAX	495160	12.50	15.34	25.58
ZMAX	495162	13.50	14.84	25.57
ZMAX	495165	13.50	15.49	25.70
ZMAX	495170	12.50	15.70	24.82
ZMAX	495180	10.45	12.41	0.00
ZMAX	495210	12.50	13.90	25.12
ZMAX	495215	12.50	14.12	13.35
ZMAX	495230	8.82	11.69	13.03
ZMAX	495235	10.50	13.33	24.80
ZMAX	495240	8.50	10.63	28.32
ZMAX	495260	13.00	15.50	23.82
ZMAX	495270	12.50	14.11	13.35
ZMAX	495275	11.50	13.10	13.50
ZMAX	495280	10.90	11.14	13.52
ZMAX	495300	13.94	15.46	14.30
ZMAX	495302	13.90	15.41	14.35

ALTERNATIVE 6 5-YEAR 24-HOUR

ZMAX	495304	13.31	15.27	13.30
ZMAX	495306	12.73	14.11	14.57
ZMAX	495308	12.18	14.02	14.85
ZMAX	495310	11.49	12.96	13.53
ZMAX	495312	10.92	12.94	13.42
ZMAX	495314	10.43	12.92	25.73
ZMAX	495316	11.80	14.11	12.53
ZMAX	495320	9.75	12.92	25.72
ZMAX	495322	9.64	14.08	17.45
ZMAX	495324	9.44	13.88	17.78
ZMAX	495326	9.30	13.44	19.92
ZMAX	495328	9.43	13.33	21.12
ZMAX	495330	9.20	13.33	21.18
ZMAX	495332	9.02	13.33	21.13
ZMAX	495334	8.90	13.14	24.47
ZMAX	495336	8.72	12.92	25.67
ZMAX	495338	8.53	12.91	25.78
ZMAX	495340	8.40	12.90	25.77
ZMAX	495342	8.23	12.90	25.75
ZMAX	495344	8.04	12.76	26.12
ZMAX	495346	7.85	12.57	26.47
ZMAX	495348	7.66	12.32	26.72
ZMAX	495350	7.47	10.99	27.45
ZMAX	495352	7.34	10.64	28.28
ZMAX	495354	7.26	10.63	28.30
ZMAX	495356	7.19	10.59	28.35
ZMAX	496010	14.50	16.24	0.12
ZMAX	496020	14.50	18.79	0.00
ZMAX	496030	14.50	16.32	0.02
ZMAX	496060	16.60	16.75	12.83
ZMAX	496065	14.00	16.28	0.10
ZMAX	496070	14.00	16.25	0.10
ZMAX	496080	14.20	17.99	0.00
ZMAX	496090	14.00	17.99	0.00
ZMAX	496100	12.50	15.91	0.07
ZMAX	496110	11.00	15.44	14.70
ZMAX	496120	13.00	15.09	14.60
ZMAX	496125	12.00	14.10	19.67
ZMAX	496130	13.00	15.37	14.70
ZMAX	496150	14.00	15.41	14.72
ZMAX	496160	11.00	14.10	19.67
ZMAX	496170	12.00	15.43	14.70
ZMAX	496175	12.00	14.85	14.63
ZMAX	496180	11.00	13.17	14.25
ZMAX	496190	11.00	13.17	14.30
ZMAX	496200	10.50	11.31	14.30
ZMAX	496232	16.00	18.00	0.00
ZMAX	496234	14.00	16.36	0.15
ZMAX	496235	15.00	15.41	0.12
ZMAX	496240	14.28	15.85	0.03
ZMAX	496245	13.50	15.18	0.12
ZMAX	496260	13.50	15.05	0.28
ZMAX	496270	12.50	13.68	0.27
ZMAX	496280	9.50	12.15	14.28
ZMAX	496310	10.50	11.37	14.30
ZMAX	496320	10.50	11.22	14.27
ZMAX	496340	4.43	10.06	14.62
ZMAX	496350	8.50	9.88	25.07
ZMAX	496360	7.50	8.97	25.27
ZMAX	496370	6.50	8.18	14.23
ZMAX	496380	5.50	8.03	15.77
ZMAX	496390	4.41	8.10	15.68
ZMAX	496395	4.50	7.89	16.15
ZMAX	496400	6.50	8.03	15.75
ZMAX	496410	-0.65	7.89	16.13
ZMAX	496420	3.50	6.88	18.20
ZMAX	496430	5.50	9.04	14.10

ALTERNATIVE 6 5-YEAR 24-HOUR

ZMAX	496440	5.50	7.82	27.10
ZMAX	496450	3.50	7.82	27.10
ZMAX	496460	5.50	9.98	26.00
ZMAX	496470	3.00	7.30	18.20
ZMAX	496480	6.50	8.35	25.10
ZMAX	496485	7.50	10.67	25.40
ZMAX	496490	3.50	8.27	24.98
ZMAX	496500	6.50	11.00	0.00
ZMAX	496510	4.50	7.41	25.10
ZMAX	496515	4.50	7.97	16.62
ZMAX	496520	5.50	7.30	18.20
ZMAX	496530	5.50	7.30	18.22
ZMAX	496540	6.50	7.30	18.20
ZMAX	496545	4.00	7.30	18.20
ZMAX	496550	4.00	7.30	18.20
ZMAX	496560	3.00	7.30	18.18
ZMAX	496570	5.50	7.30	18.20
ZMAX	496580	7.50	10.88	24.98
ZMAX	496590	4.50	7.89	16.15
ZMAX	496600	-1.88	7.30	18.13
ZMAX	496610	4.50	7.18	13.22
ZMAX	496620	4.50	7.17	13.23
ZMAX	497010	11.00	13.88	13.82
ZMAX	497020	3.50	10.38	28.82
ZMAX	497025	8.50	11.09	12.88
ZMAX	497035	6.50	10.20	13.87
ZMAX	497045	4.50	7.67	14.68
ZMAX	497050	3.50	7.66	14.70
ZMAX	497055	3.50	6.68	13.62
ZMAX	497065	1.88	5.09	14.30
ZMAX	497070	8.50	9.97	12.95
ZMAX	497080	2.06	6.03	0.00
ZMAX	497085	6.50	10.21	29.10
ZMAX	497086	6.32	10.59	28.35
ZMAX	497088	5.89	10.38	28.82
ZMAX	497090	4.32	10.25	29.10
ZMAX	497092	3.75	9.78	29.27
ZMAX	497094	2.75	9.33	29.30
ZMAX	497096	2.30	8.63	29.30
ZMAX	497098	1.85	8.42	29.30
ZMAX	497100	-0.16	6.87	29.32
ZMAX	497102	-1.57	6.12	28.83
ZMAX	497104	-2.19	5.85	28.60
ZMAX	497105	-1.00	5.83	28.60
ZMAX	497106	-1.37	4.80	19.03
ZMAX	497107	-2.07	4.78	19.02
ZMAX	497108	-0.37	4.76	18.97
ZMAX	497109	-4.75	4.83	18.78
ZMAX	497111	-3.66	4.76	18.87
ZMAX	497112	-3.66	4.97	18.80
ZMAX	497113	-5.33	5.22	18.92
ZMAX	497110	-0.19	7.02	25.12
ZMAX	497120	1.50	4.79	19.02
ZMAX	497122	4.50	5.42	13.18
ZMAX	497124	4.00	4.79	19.02
ZMAX	497130	-0.21	7.01	25.13
ZMAX	497140	4.00	6.50	0.00
ZMAX	497150	5.40	6.88	12.50
ZMAX	497160	-1.85	6.88	18.20
ZMAX	497161	-2.25	6.43	18.27
ZMAX	497162	-2.86	5.67	18.42
ZMAX	497170	-6.19	3.38	18.93
ZMAX	500010	6.94	10.77	12.72
ZMAX	500020	8.41	9.59	13.77
ZMAX	500025	6.13	9.70	12.85
ZMAX	500030	5.77	9.61	12.88
ZMAX	500040	5.07	9.44	12.97

ALTERNATIVE 6 5-YEAR 24-HOUR

ZMAX	500050	4.00	8.65	29.30
ZMAX	500110	7.43	10.43	12.73
ZMAX	500120	6.16	10.24	30.47
ZMAX	500130	8.00	10.81	13.42
ZMAX	500140	6.39	10.24	30.45
ZMAX	500210	4.00	10.24	30.42
ZMAX	500220	6.91	10.84	12.57
ZMAX	500300	5.00	9.92	12.78
ZMAX	9498000	-6.69	2.96	0.00
ZMAX	9496630	12.00	12.00	0.00
ZMAX	9493020	20.00	20.00	0.00
ZMAX	9493060	22.50	22.50	0.00
ZMAX	9493190	19.00	19.00	0.00
ZMAX	9493140	19.98	19.98	0.00
ZMAX	9493150	19.70	19.70	0.00
ZMAX	9493240	19.00	19.00	0.00
ZMAX	9495030	17.48	17.48	0.00
ZMAX	9495010	23.20	23.20	0.00
ZMAX	9495085	15.10	15.10	0.00
ZMAX	9495140	16.00	16.00	0.00
ZMAX	9495145	16.00	16.00	0.00
ZMAX	9495160	15.50	15.50	0.00
ZMAX	9496320	11.00	11.00	0.00
ZMAX	9496260	14.00	14.00	0.00
ZMAX	9494250	18.00	18.00	0.00
ZMAX	9494190	18.50	18.50	0.00
ZMAX	100043	99.00	99.00	0.00
ZMAX	100044	99.00	99.00	0.00
ZMAX	100045	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100047	99.00	99.00	0.00
ZMAX	100048	99.00	99.00	0.00
ZMAX	100049	99.00	99.00	0.00
ZMAX	100050	99.00	99.00	0.00
ZMAX	100051	99.00	99.00	0.00
ZMAX	100052	99.00	99.00	0.00
ZMAX	100053	99.00	99.00	0.00
ZMAX	100054	99.00	99.00	0.00
ZMAX	100055	99.00	99.00	0.00
ZMAX	100056	99.00	99.00	0.00
ZMAX	100057	99.00	99.00	0.00
ZMAX	100058	99.00	99.00	0.00
ZMAX	100059	99.00	99.00	0.00
ZMAX	100060	99.00	99.00	0.00
ZMAX	100061	99.00	99.00	0.00
ZMAX	100062	99.00	99.00	0.00
ZMAX	100063	99.00	99.00	0.00
ZMAX	100064	99.00	99.00	0.00
ZMAX	100065	99.00	99.00	0.00
ZMAX	100066	99.00	99.00	0.00
ZMAX	100067	99.00	99.00	0.00
ZMAX	100068	99.00	99.00	0.00
ZMAX	100069	99.00	99.00	0.00
ZMAX	100070	99.00	99.00	0.00
ZMAX	100071	99.00	99.00	0.00
ZMAX	100072	99.00	99.00	0.00
ZMAX	100073	99.00	99.00	0.00
ZMAX	100074	99.00	99.00	0.00
ZMAX	100075	99.00	99.00	0.00
ZMAX	100076	99.00	99.00	0.00
ZMAX	100077	99.00	99.00	0.00
ZMAX	100078	99.00	99.00	0.00
ZMAX	100079	99.00	99.00	0.00
ZMAX	100080	99.00	99.00	0.00
ZMAX	100081	99.00	99.00	0.00
ZMAX	100082	99.00	99.00	0.00

ALTERNATIVE 6 5-YEAR 24-HOUR

ZMAX	100083	99.00	99.00	0.00
ZMAX	100084	99.00	99.00	0.00
ZMAX	100085	99.00	99.00	0.00
ZMAX	100086	99.00	99.00	0.00
ZMAX	100087	99.00	99.00	0.00
ZMAX	100088	99.00	99.00	0.00
ZMAX	100089	99.00	99.00	0.00
ZMAX	700010	25.96	43.63	182.68

ALTERNATIVE 6 25-YEAR 24-HOUR

	JUNC ID	INVT	Z_MAX	T_MAX
ZMAX	490000	24.23	26.46	0.00
ZMAX	490004	26.46	27.28	13.78
ZMAX	490002	20.93	26.14	14.82
ZMAX	490008	27.00	28.75	30.02
ZMAX	490010	26.16	28.77	27.03
ZMAX	490020	24.36	28.66	32.30
ZMAX	490030	26.46	28.67	26.00
ZMAX	490040	29.00	30.43	26.53
ZMAX	490050	25.16	28.78	15.58
ZMAX	490070	25.96	27.77	240.00
ZMAX	490071	29.00	30.10	14.08
ZMAX	490072	27.00	28.61	27.35
ZMAX	490073	30.00	32.38	13.73
ZMAX	490080	27.66	33.16	240.00
ZMAX	490090	28.00	33.47	240.00
ZMAX	490100	29.00	29.83	14.02
ZMAX	490110	26.16	30.32	20.43
ZMAX	490120	30.64	33.28	88.20
ZMAX	490130	28.96	33.31	88.20
ZMAX	490140	29.26	31.82	240.00
ZMAX	490141	31.00	32.77	26.40
ZMAX	490150	29.89	34.11	86.20
ZMAX	490160	29.77	35.55	76.17
ZMAX	490170	35.00	38.95	18.53
ZMAX	490180	32.66	38.72	29.67
ZMAX	490181	33.75	38.72	29.78
ZMAX	490200	36.66	38.92	14.87
ZMAX	490210	36.29	38.67	18.67
ZMAX	490211	39.00	40.68	15.37
ZMAX	490220	40.04	42.87	15.73
ZMAX	490221	42.00	45.25	24.38
ZMAX	490230	39.95	41.46	25.25
ZMAX	490240	26.36	31.06	20.40
ZMAX	490250	29.00	33.11	18.93
ZMAX	490251	33.00	35.73	29.95
ZMAX	490260	31.16	34.72	19.57
ZMAX	490261	34.00	36.25	13.68
ZMAX	490263	34.00	35.98	28.08
ZMAX	490264	33.00	35.25	19.08
ZMAX	490266	34.00	36.12	16.08
ZMAX	490270	35.00	38.99	14.97
ZMAX	490280	32.70	35.73	29.93
ZMAX	490281	32.70	35.73	29.90
ZMAX	490290	31.00	34.93	16.10
ZMAX	490300	31.86	34.84	17.57
ZMAX	490310	33.00	37.13	17.63
ZMAX	490320	34.00	37.98	16.77
ZMAX	490321	36.00	38.60	24.48
ZMAX	490330	37.00	38.74	15.72
ZMAX	490340	35.00	37.94	15.93
ZMAX	490350	36.00	38.77	15.67
ZMAX	490370	33.96	36.43	57.00
ZMAX	490375	35.00	38.61	54.25
ZMAX	490390	34.56	38.71	19.92
ZMAX	490391	36.80	38.00	21.57
ZMAX	490392	36.40	37.07	15.38
ZMAX	490400	37.00	39.01	16.07
ZMAX	490401	37.00	39.71	25.98
ZMAX	490410	35.46	38.61	54.18
ZMAX	490411	36.00	38.61	54.30
ZMAX	490420	35.00	40.76	48.58
ZMAX	490421	39.00	40.16	28.50
ZMAX	490422	39.00	41.18	16.93
ZMAX	490425	38.00	40.76	49.17
ZMAX	490430	35.47	41.32	28.23
ZMAX	490440	40.00	43.49	26.10

ALTERNATIVE 6 25-YEAR 24-HOUR

ZMAX	490450	39.00	40.86	25.57
ZMAX	490451	39.00	40.57	63.08
ZMAX	490453	39.00	40.57	63.08
ZMAX	490455	39.00	40.77	18.40
ZMAX	490460	43.00	46.56	27.58
ZMAX	490470	40.00	42.50	36.23
ZMAX	490480	39.67	42.50	36.18
ZMAX	490490	40.38	42.78	21.83
ZMAX	490500	41.00	45.04	35.87
ZMAX	490510	49.00	51.19	17.32
ZMAX	490520	43.47	49.71	24.33
ZMAX	490530	51.00	54.87	82.32
ZMAX	490535	56.47	58.48	15.63
ZMAX	490540	56.00	58.76	15.58
ZMAX	490550	48.00	49.84	16.68
ZMAX	490555	48.07	52.12	13.70
ZMAX	490560	49.00	50.03	16.08
ZMAX	490580	35.47	41.48	28.00
ZMAX	490590	48.37	49.84	25.68
ZMAX	490600	42.54	44.75	15.92
ZMAX	490610	39.77	42.47	26.28
ZMAX	490612	42.00	44.27	15.28
ZMAX	490620	41.70	43.14	15.70
ZMAX	490621	44.00	45.43	18.08
ZMAX	490630	42.17	45.13	22.68
ZMAX	490637	41.53	43.06	14.32
ZMAX	490638	44.12	44.62	24.58
ZMAX	490639	48.72	49.71	15.05
ZMAX	490640	37.57	41.57	26.95
ZMAX	490641	44.00	48.12	24.27
ZMAX	490642	45.16	48.40	16.60
ZMAX	490643	39.87	45.63	16.23
ZMAX	490644	47.67	49.63	15.20
ZMAX	490645	48.67	51.72	14.87
ZMAX	490646	41.53	47.77	14.02
ZMAX	490650	43.27	45.90	17.90
ZMAX	490651	48.16	50.96	16.93
ZMAX	490652	43.47	46.34	14.20
ZMAX	490654	46.00	48.44	17.00
ZMAX	490655	46.55	48.90	14.03
ZMAX	490659	45.57	49.12	15.45
ZMAX	490660	39.87	47.60	15.55
ZMAX	490661	45.57	50.45	15.18
ZMAX	490670	45.37	49.21	15.73
ZMAX	490675	41.87	49.03	15.62
ZMAX	490680	47.11	50.23	16.72
ZMAX	490690	45.49	49.30	15.95
ZMAX	490700	53.74	59.45	29.95
ZMAX	490710	47.96	52.70	27.10
ZMAX	490711	52.00	54.53	16.28
ZMAX	490720	50.00	52.67	27.00
ZMAX	490730	50.23	53.77	26.23
ZMAX	490740	49.64	54.17	16.68
ZMAX	490742	58.00	59.70	28.00
ZMAX	490743	48.76	54.22	17.32
ZMAX	490744	49.87	54.22	17.32
ZMAX	490745	57.00	59.70	28.00
ZMAX	490746	57.00	60.23	26.48
ZMAX	490750	51.30	54.18	17.95
ZMAX	490751	55.00	56.59	25.63
ZMAX	490760	50.95	54.43	24.75
ZMAX	490770	51.91	55.55	26.07
ZMAX	490771	55.00	56.66	25.73
ZMAX	490772	56.00	57.91	26.25
ZMAX	490773	56.00	59.07	25.82
ZMAX	490776	56.00	57.62	25.05
ZMAX	490779	55.00	57.37	16.63

ALTERNATIVE 6 25-YEAR 24-HOUR

ZMAX	490780	54.21	57.67	22.25
ZMAX	490790	53.17	55.58	28.32
ZMAX	490791	56.00	58.61	27.17
ZMAX	490792	56.00	58.35	25.97
ZMAX	490794	56.00	57.67	29.38
ZMAX	490795	56.00	57.44	27.33
ZMAX	490800	53.17	55.96	14.97
ZMAX	490801	55.00	57.44	16.42
ZMAX	490802	56.00	58.00	25.58
ZMAX	490803	57.00	58.52	27.98
ZMAX	490804	56.00	58.52	27.70
ZMAX	490900	53.67	55.58	28.42
ZMAX	491010	22.06	25.52	14.12
ZMAX	491019	26.44	27.85	18.53
ZMAX	491020	26.14	29.05	16.60
ZMAX	491021	26.00	29.05	17.78
ZMAX	491022	27.07	29.04	17.30
ZMAX	491040	23.16	25.71	14.08
ZMAX	491041	26.86	29.46	13.87
ZMAX	491042	27.66	28.87	16.80
ZMAX	491043	27.17	28.78	16.83
ZMAX	491044	27.66	29.37	13.92
ZMAX	491060	25.96	29.82	63.60
ZMAX	491080	25.66	30.05	63.60
ZMAX	491100	28.96	31.12	62.93
ZMAX	491102	29.00	31.46	13.23
ZMAX	491120	27.86	31.87	84.13
ZMAX	491121	29.25	32.32	29.87
ZMAX	491122	32.00	33.38	13.42
ZMAX	491123	32.00	33.78	17.00
ZMAX	491140	29.62	32.47	29.55
ZMAX	491160	30.66	33.39	16.55
ZMAX	491180	32.00	35.42	26.15
ZMAX	491200	34.46	37.36	15.20
ZMAX	491220	36.97	38.44	19.33
ZMAX	491221	33.05	36.58	15.85
ZMAX	491222	36.80	38.95	13.12
ZMAX	491223	34.39	36.59	15.83
ZMAX	491240	31.00	33.19	27.75
ZMAX	491260	29.00	31.91	41.52
ZMAX	491280	29.00	32.00	38.45
ZMAX	491285	30.77	39.04	14.15
ZMAX	491300	29.00	31.92	41.52
ZMAX	491302	33.00	36.56	16.10
ZMAX	491320	32.90	36.55	15.93
ZMAX	491340	29.17	32.95	42.82
ZMAX	491344	36.00	38.48	27.60
ZMAX	491342	31.36	34.15	14.47
ZMAX	491360	33.97	36.88	16.73
ZMAX	491380	31.36	35.65	16.87
ZMAX	491382	33.00	33.59	14.38
ZMAX	491384	30.00	32.34	19.10
ZMAX	491387	34.17	39.59	25.33
ZMAX	491388	34.17	41.26	23.77
ZMAX	491390	36.63	39.63	15.52
ZMAX	491391	35.17	39.68	25.27
ZMAX	491393	42.00	45.45	23.05
ZMAX	491394	36.67	40.94	15.98
ZMAX	491395	35.27	39.68	25.25
ZMAX	491396	38.00	41.23	25.05
ZMAX	491397	32.07	39.50	25.43
ZMAX	491398	42.00	44.13	19.02
ZMAX	491399	38.00	41.28	23.77
ZMAX	491400	33.27	38.16	25.80
ZMAX	491401	36.77	42.43	14.37
ZMAX	491402	32.17	39.56	25.02
ZMAX	491404	38.96	41.29	23.82

ALTERNATIVE 6 25-YEAR 24-HOUR

ZMAX	491406	36.77	40.95	15.97
ZMAX	491407	32.17	39.52	25.22
ZMAX	491392	43.00	47.53	19.02
ZMAX	491403	45.00	48.19	18.73
ZMAX	491440	38.17	39.98	20.50
ZMAX	491441	38.54	39.98	20.45
ZMAX	491460	30.71	36.68	14.35
ZMAX	491465	31.27	36.50	25.53
ZMAX	491480	33.87	36.84	13.53
ZMAX	491500	30.00	36.55	27.15
ZMAX	491501	31.17	36.54	27.22
ZMAX	491502	36.00	38.05	24.28
ZMAX	491520	38.15	41.52	13.77
ZMAX	491540	41.00	44.22	16.58
ZMAX	491541	42.00	46.58	27.38
ZMAX	491452	42.00	44.02	19.80
ZMAX	491453	37.18	40.18	13.47
ZMAX	491560	41.00	41.97	29.05
ZMAX	491561	38.00	42.12	29.72
ZMAX	491562	44.00	45.31	30.95
ZMAX	491563	39.00	42.12	29.67
ZMAX	491580	36.55	38.25	240.00
ZMAX	491600	39.73	42.59	159.15
ZMAX	491620	45.57	47.10	27.02
ZMAX	491621	48.00	50.63	27.65
ZMAX	490232	44.00	46.68	15.08
ZMAX	490431	41.00	44.60	26.55
ZMAX	490449	41.00	43.73	16.33
ZMAX	490457	39.00	40.79	18.67
ZMAX	490491	47.00	50.31	219.30
ZMAX	490492	47.00	51.03	17.72
ZMAX	490501	46.00	49.01	13.98
ZMAX	490511	48.00	50.60	28.05
ZMAX	490561	57.00	58.80	27.85
ZMAX	490581	44.00	46.11	14.50
ZMAX	490582	50.00	52.16	14.25
ZMAX	490584	50.00	52.32	25.10
ZMAX	490587	53.00	57.25	14.03
ZMAX	490701	54.00	58.71	15.35
ZMAX	490702	57.00	60.53	15.67
ZMAX	490703	53.74	55.40	14.15
ZMAX	490704	56.00	60.69	13.47
ZMAX	490713	52.00	54.37	19.92
ZMAX	490741	58.00	59.18	28.28
ZMAX	490762	56.00	59.03	25.53
ZMAX	490781	58.00	62.09	17.28
ZMAX	491274	31.22	39.06	14.17
ZMAX	491284	33.92	36.96	14.38
ZMAX	491389	39.00	40.60	20.42
ZMAX	491700	23.00	37.80	240.00
ZMAX	491701	17.00	37.84	240.00
ZMAX	491702	55.00	57.51	32.57
ZMAX	491703	25.00	37.82	240.00
ZMAX	491704	56.00	58.78	15.47
ZMAX	491705	55.80	57.51	32.57
ZMAX	491706	48.90	51.94	27.80
ZMAX	491707	45.00	46.96	30.25
ZMAX	491708	36.00	38.59	24.65
ZMAX	491709	37.00	39.24	15.80
ZMAX	491710	27.00	37.82	240.00
ZMAX	491712	30.33	37.65	240.00
ZMAX	491713	30.00	37.68	240.00
ZMAX	491714	31.00	37.74	240.00
ZMAX	491715	40.17	42.50	36.30
ZMAX	491716	30.00	37.65	240.00
ZMAX	491717	52.00	55.24	16.38
ZMAX	491718	34.00	37.74	240.00

ALTERNATIVE 6 25-YEAR 24-HOUR

ZMAX	491719	42.00	46.66	28.32
ZMAX	491720	38.00	40.61	15.87
ZMAX	491721	38.00	40.53	25.87
ZMAX	491722	39.00	39.92	17.15
ZMAX	491723	29.00	37.81	56.38
ZMAX	491724	29.00	37.65	240.00
ZMAX	491725	33.00	37.68	240.00
ZMAX	491728	30.00	37.82	240.00
ZMAX	491729	27.00	37.79	240.00
ZMAX	491730	26.00	37.76	240.00
ZMAX	491737	38.00	38.64	15.87
ZMAX	491740	37.00	38.62	15.67
ZMAX	491745	37.00	39.14	17.67
ZMAX	491746	37.00	39.08	26.35
ZMAX	491750	44.00	46.32	27.67
ZMAX	491753	49.00	51.45	21.95
ZMAX	490574	41.77	46.00	16.02
ZMAX	491405	42.00	44.60	17.08
ZMAX	490714	52.00	54.56	16.50
ZMAX	490753	51.00	54.46	29.98
ZMAX	491224	39.00	42.78	28.87
ZMAX	491225	41.50	43.96	14.92
ZMAX	491759	39.00	40.68	22.40
ZMAX	491760	39.00	40.61	22.92
ZMAX	491764	38.00	40.38	24.43
ZMAX	491768	38.00	40.29	24.43
ZMAX	499999	35.85	40.24	24.53
ZMAX	499998	35.80	40.22	24.48
ZMAX	499997	35.00	36.00	24.48
ZMAX	491002	30.84	37.68	240.00
ZMAX	491001	28.00	37.68	240.00
ZMAX	100000	99.00	99.00	0.00
ZMAX	100001	99.00	99.00	0.00
ZMAX	100002	99.00	99.00	0.00
ZMAX	100003	99.00	99.00	0.00
ZMAX	100004	99.00	99.00	0.00
ZMAX	100005	99.00	99.00	0.00
ZMAX	100006	99.00	99.00	0.00
ZMAX	100007	99.00	99.00	0.00
ZMAX	100008	99.00	99.00	0.00
ZMAX	100009	99.00	99.00	0.00
ZMAX	100010	99.00	99.00	0.00
ZMAX	100011	99.00	99.00	0.00
ZMAX	100012	99.00	99.00	0.00
ZMAX	100013	99.00	99.00	0.00
ZMAX	100014	99.00	99.00	0.00
ZMAX	100015	99.00	99.00	0.00
ZMAX	100016	99.00	99.00	0.00
ZMAX	100017	99.00	99.00	0.00
ZMAX	100018	99.00	99.00	0.00
ZMAX	100019	99.00	99.00	0.00
ZMAX	100020	99.00	99.00	0.00
ZMAX	100021	99.00	99.00	0.00
ZMAX	100022	99.00	99.00	0.00
ZMAX	100023	99.00	99.00	0.00
ZMAX	100024	99.00	99.00	0.00
ZMAX	100025	99.00	99.00	0.00
ZMAX	100026	99.00	99.00	0.00
ZMAX	100027	99.00	99.00	0.00
ZMAX	100028	99.00	99.00	0.00
ZMAX	100029	99.00	99.00	0.00
ZMAX	100030	99.00	99.00	0.00
ZMAX	100031	99.00	99.00	0.00
ZMAX	100032	99.00	99.00	0.00
ZMAX	100033	99.00	99.00	0.00
ZMAX	100034	99.00	99.00	0.00
ZMAX	100035	99.00	99.00	0.00

ALTERNATIVE 6 25-YEAR 24-HOUR

ZMAX	100036	99.00	99.00	0.00
ZMAX	100037	99.00	99.00	0.00
ZMAX	100038	99.00	99.00	0.00
ZMAX	100039	99.00	99.00	0.00
ZMAX	100040	99.00	99.00	0.00
ZMAX	493010	17.00	23.49	25.48
ZMAX	493020	20.00	23.04	18.10
ZMAX	493030	18.00	24.47	13.05
ZMAX	493040	17.00	22.33	17.12
ZMAX	493060	21.00	21.50	13.27
ZMAX	493070	19.00	26.94	13.57
ZMAX	493090	18.00	23.45	25.08
ZMAX	493100	20.00	21.15	12.67
ZMAX	493110	18.00	20.02	12.90
ZMAX	493120	18.00	19.99	0.00
ZMAX	493130	17.00	20.16	12.70
ZMAX	493140	16.00	18.79	13.38
ZMAX	493150	16.00	19.40	13.03
ZMAX	493180	18.00	24.23	13.98
ZMAX	493185	19.00	24.20	14.00
ZMAX	493190	17.00	19.35	12.98
ZMAX	493195	17.00	20.16	13.05
ZMAX	493200	18.00	19.89	14.35
ZMAX	493210	18.00	19.27	12.98
ZMAX	493215	19.00	21.01	20.03
ZMAX	493220	16.00	19.14	13.10
ZMAX	493230	15.50	18.79	13.38
ZMAX	493240	16.00	19.33	27.43
ZMAX	493250	17.00	24.23	14.00
ZMAX	493260	21.00	24.21	14.02
ZMAX	493270	19.00	24.19	14.03
ZMAX	493280	19.00	23.09	13.00
ZMAX	493290	19.00	22.29	13.02
ZMAX	493310	17.00	22.20	15.27
ZMAX	493320	17.00	19.87	14.37
ZMAX	493330	17.00	19.87	13.47
ZMAX	493340	16.33	19.84	14.35
ZMAX	493350	15.50	17.76	13.03
ZMAX	493360	13.00	18.00	0.00
ZMAX	493370	14.61	18.28	13.85
ZMAX	493380	14.50	17.52	14.83
ZMAX	493390	14.50	18.09	13.43
ZMAX	493400	13.50	17.53	14.80
ZMAX	493410	12.50	17.52	14.82
ZMAX	493420	13.50	16.29	0.03
ZMAX	493430	12.44	15.97	0.08
ZMAX	493440	15.50	19.33	27.43
ZMAX	493450	18.00	19.06	14.53
ZMAX	493470	16.00	19.06	14.55
ZMAX	493480	15.50	19.08	14.53
ZMAX	493500	12.27	17.00	14.37
ZMAX	493505	12.27	16.90	16.72
ZMAX	493520	11.76	14.97	15.90
ZMAX	493525	11.00	14.88	15.78
ZMAX	493530	14.50	17.29	13.67
ZMAX	493535	15.00	17.29	13.67
ZMAX	493540	13.50	15.99	0.00
ZMAX	493545	9.65	14.82	15.72
ZMAX	493550	14.50	15.24	12.67
ZMAX	493555	13.50	14.88	13.63
ZMAX	494010	24.80	26.00	0.00
ZMAX	494020	22.90	25.59	12.67
ZMAX	494025	20.00	21.25	12.73
ZMAX	494030	22.00	22.74	13.00
ZMAX	494040	19.00	20.56	13.03
ZMAX	494045	18.70	20.56	13.03
ZMAX	494050	20.00	25.00	0.00

ALTERNATIVE 6 25-YEAR 24-HOUR

ZMAX	494060	25.00	26.00	0.00
ZMAX	494070	18.00	19.88	13.68
ZMAX	494072	19.00	22.07	13.53
ZMAX	494074	20.00	21.08	12.73
ZMAX	494076	19.00	21.08	12.72
ZMAX	494078	21.00	22.18	12.73
ZMAX	494080	18.00	20.17	12.83
ZMAX	494100	17.00	19.08	15.12
ZMAX	494110	15.29	17.68	14.93
ZMAX	494120	18.00	19.32	13.43
ZMAX	494130	17.00	18.47	14.57
ZMAX	494140	14.50	18.46	14.60
ZMAX	494150	15.00	17.68	14.92
ZMAX	494170	18.00	19.89	13.65
ZMAX	494180	17.00	19.64	14.57
ZMAX	494185	17.00	19.77	13.73
ZMAX	494190	17.00	18.71	13.80
ZMAX	494200	15.00	16.97	0.03
ZMAX	494205	17.00	19.05	12.60
ZMAX	494210	14.87	18.80	0.00
ZMAX	494220	15.75	18.22	0.02
ZMAX	494230	16.00	18.12	14.12
ZMAX	494240	15.71	18.39	13.38
ZMAX	494250	16.70	17.98	0.00
ZMAX	495010	20.00	23.23	12.52
ZMAX	495020	15.50	19.33	27.43
ZMAX	495030	15.50	19.33	27.43
ZMAX	495035	19.00	21.09	24.97
ZMAX	495038	17.00	18.17	12.78
ZMAX	495040	16.00	18.70	12.88
ZMAX	495045	15.00	15.88	12.68
ZMAX	495050	15.50	18.89	24.92
ZMAX	495055	15.50	16.83	12.57
ZMAX	495060	14.80	15.87	12.70
ZMAX	495065	14.50	16.26	12.57
ZMAX	495070	11.50	13.92	17.82
ZMAX	495075	11.50	13.54	22.12
ZMAX	495080	13.18	13.99	0.00
ZMAX	495085	13.00	15.04	17.12
ZMAX	495090	11.42	13.57	21.67
ZMAX	495100	15.00	18.47	14.75
ZMAX	495110	14.50	17.09	12.50
ZMAX	495120	13.00	14.23	12.92
ZMAX	495125	14.42	16.27	14.60
ZMAX	495140	14.50	16.81	26.47
ZMAX	495145	14.50	16.81	26.47
ZMAX	495150	13.00	14.24	12.92
ZMAX	495152	12.50	16.09	25.52
ZMAX	495154	12.50	16.02	19.38
ZMAX	495155	12.50	16.02	19.38
ZMAX	495156	12.50	13.49	0.00
ZMAX	495160	12.50	16.03	24.87
ZMAX	495162	13.50	15.57	25.52
ZMAX	495165	13.50	16.01	17.57
ZMAX	495170	12.50	15.75	13.55
ZMAX	495180	10.45	12.88	22.95
ZMAX	495210	12.50	14.68	25.08
ZMAX	495215	12.50	14.23	12.93
ZMAX	495230	8.82	12.33	13.10
ZMAX	495235	10.50	13.88	24.82
ZMAX	495240	8.50	11.23	24.32
ZMAX	495260	13.00	16.05	24.57
ZMAX	495270	12.50	14.22	12.93
ZMAX	495275	11.50	13.22	12.92
ZMAX	495280	10.90	11.27	12.97
ZMAX	495300	13.94	15.71	13.67
ZMAX	495302	13.90	15.67	13.55

ALTERNATIVE 6 25-YEAR 24-HOUR

ZMAX	495304	13.31	15.60	13.22
ZMAX	495306	12.73	14.39	13.88
ZMAX	495308	12.18	14.26	14.23
ZMAX	495310	11.49	13.56	21.75
ZMAX	495312	10.92	13.56	21.83
ZMAX	495314	10.43	13.55	22.00
ZMAX	495316	11.80	14.15	12.53
ZMAX	495320	9.75	13.55	22.00
ZMAX	495322	9.64	14.74	15.77
ZMAX	495324	9.44	14.48	16.05
ZMAX	495326	9.30	14.05	17.22
ZMAX	495328	9.43	13.92	17.82
ZMAX	495330	9.20	13.92	17.82
ZMAX	495332	9.02	13.92	17.78
ZMAX	495334	8.90	13.70	20.23
ZMAX	495336	8.72	13.55	22.03
ZMAX	495338	8.53	13.54	22.12
ZMAX	495340	8.40	13.53	22.13
ZMAX	495342	8.23	13.52	22.18
ZMAX	495344	8.04	13.36	22.47
ZMAX	495346	7.85	13.24	22.67
ZMAX	495348	7.66	12.88	22.93
ZMAX	495350	7.47	11.59	23.83
ZMAX	495352	7.34	11.24	24.30
ZMAX	495354	7.26	11.24	24.30
ZMAX	495356	7.19	11.18	24.32
ZMAX	496010	14.50	16.28	14.63
ZMAX	496020	14.50	18.79	0.00
ZMAX	496030	14.50	16.32	0.02
ZMAX	496060	16.60	16.77	12.83
ZMAX	496065	14.00	16.28	0.10
ZMAX	496070	14.00	16.25	0.10
ZMAX	496080	14.20	17.99	0.00
ZMAX	496090	14.00	17.99	0.00
ZMAX	496100	12.50	15.91	0.07
ZMAX	496110	11.00	15.73	14.88
ZMAX	496120	13.00	15.31	13.30
ZMAX	496125	12.00	15.19	20.75
ZMAX	496130	13.00	15.61	14.95
ZMAX	496150	14.00	15.69	14.92
ZMAX	496160	11.00	15.19	20.75
ZMAX	496170	12.00	15.72	14.90
ZMAX	496175	12.00	14.94	14.93
ZMAX	496180	11.00	13.28	13.00
ZMAX	496190	11.00	13.27	13.00
ZMAX	496200	10.50	11.93	15.68
ZMAX	496232	16.00	18.00	0.00
ZMAX	496234	14.00	16.36	0.15
ZMAX	496235	15.00	15.41	0.12
ZMAX	496240	14.28	15.85	0.03
ZMAX	496245	13.50	15.22	13.68
ZMAX	496260	13.50	15.17	13.67
ZMAX	496270	12.50	13.85	13.57
ZMAX	496280	9.50	12.33	13.90
ZMAX	496310	10.50	11.92	15.68
ZMAX	496320	10.50	11.90	15.72
ZMAX	496340	4.43	11.89	15.70
ZMAX	496350	8.50	10.59	25.02
ZMAX	496360	7.50	9.08	13.68
ZMAX	496370	6.50	8.66	17.53
ZMAX	496380	5.50	8.65	17.52
ZMAX	496390	4.41	8.73	17.37
ZMAX	496395	4.50	8.47	17.95
ZMAX	496400	6.50	8.65	17.50
ZMAX	496410	-0.65	8.47	17.95
ZMAX	496420	3.50	8.23	18.98
ZMAX	496430	5.50	9.18	12.98

ALTERNATIVE 6 25-YEAR 24-HOUR

ZMAX	496440	5.50	8.27	19.25
ZMAX	496450	3.50	8.27	19.25
ZMAX	496460	5.50	10.10	14.18
ZMAX	496470	3.00	8.27	19.25
ZMAX	496480	6.50	10.06	15.08
ZMAX	496485	7.50	11.00	16.52
ZMAX	496490	3.50	9.02	20.33
ZMAX	496500	6.50	11.00	0.00
ZMAX	496510	4.50	8.50	240.00
ZMAX	496515	4.50	8.27	19.25
ZMAX	496520	5.50	8.27	19.25
ZMAX	496530	5.50	8.27	19.27
ZMAX	496540	6.50	8.27	19.25
ZMAX	496545	4.00	8.27	19.25
ZMAX	496550	4.00	8.27	19.25
ZMAX	496560	3.00	8.27	19.23
ZMAX	496570	5.50	8.25	19.23
ZMAX	496580	7.50	11.01	13.97
ZMAX	496590	4.50	8.47	17.95
ZMAX	496600	-1.88	8.27	19.15
ZMAX	496610	4.50	8.20	19.13
ZMAX	496620	4.50	8.19	19.12
ZMAX	497010	11.00	13.93	13.30
ZMAX	497020	3.50	10.90	24.52
ZMAX	497025	8.50	11.15	12.73
ZMAX	497035	6.50	10.48	13.15
ZMAX	497045	4.50	8.01	13.30
ZMAX	497050	3.50	8.00	23.13
ZMAX	497055	3.50	7.01	21.93
ZMAX	497065	1.88	7.01	21.93
ZMAX	497070	8.50	10.07	12.88
ZMAX	497080	2.06	7.32	19.68
ZMAX	497085	6.50	10.68	24.55
ZMAX	497086	6.32	11.17	24.33
ZMAX	497088	5.89	10.90	24.52
ZMAX	497090	4.32	10.80	24.55
ZMAX	497092	3.75	10.57	24.60
ZMAX	497094	2.75	10.15	24.58
ZMAX	497096	2.30	9.22	24.57
ZMAX	497098	1.85	8.91	24.55
ZMAX	497100	-0.16	7.97	22.77
ZMAX	497102	-1.57	7.77	20.80
ZMAX	497104	-2.19	7.66	20.37
ZMAX	497105	-1.00	7.64	20.30
ZMAX	497106	-1.37	7.30	19.63
ZMAX	497107	-2.07	7.29	19.62
ZMAX	497108	-0.37	7.26	19.60
ZMAX	497109	-4.75	7.28	19.62
ZMAX	497111	-3.66	7.28	19.60
ZMAX	497112	-3.66	7.19	19.62
ZMAX	497113	-5.33	7.08	19.62
ZMAX	497110	-0.19	8.30	18.67
ZMAX	497120	1.50	7.29	19.63
ZMAX	497122	4.50	7.29	19.63
ZMAX	497124	4.00	7.29	19.63
ZMAX	497130	-0.21	8.14	18.08
ZMAX	497140	4.00	7.31	19.67
ZMAX	497150	5.40	7.28	19.62
ZMAX	497160	-1.85	8.17	19.07
ZMAX	497161	-2.25	7.94	19.23
ZMAX	497162	-2.86	7.48	19.52
ZMAX	497170	-6.19	4.25	19.67
ZMAX	500010	6.94	11.25	12.75
ZMAX	500020	8.41	10.31	14.30
ZMAX	500025	6.13	11.05	12.97
ZMAX	500030	5.77	11.04	12.97
ZMAX	500040	5.07	10.55	13.05

ALTERNATIVE 6 25-YEAR 24-HOUR

ZMAX	500050	4.00	9.24	24.50
ZMAX	500110	7.43	11.26	12.82
ZMAX	500120	6.16	10.80	24.55
ZMAX	500130	8.00	11.90	13.60
ZMAX	500140	6.39	10.81	24.72
ZMAX	500210	4.00	10.82	24.68
ZMAX	500220	6.91	11.27	12.73
ZMAX	500300	5.00	10.08	12.68
ZMAX	9498000	-6.69	2.96	0.00
ZMAX	9496630	12.00	12.00	0.00
ZMAX	9493020	20.00	20.00	0.00
ZMAX	9493060	22.50	22.50	0.00
ZMAX	9493190	19.00	19.00	0.00
ZMAX	9493140	19.98	19.98	0.00
ZMAX	9493150	19.70	19.70	0.00
ZMAX	9493240	19.00	19.00	0.00
ZMAX	9495030	17.48	17.48	0.00
ZMAX	9495010	23.20	23.20	0.00
ZMAX	9495085	15.10	15.10	0.00
ZMAX	9495140	16.00	16.00	0.00
ZMAX	9495145	16.00	16.00	0.00
ZMAX	9495160	15.50	15.50	0.00
ZMAX	9496320	11.00	11.00	0.00
ZMAX	9496260	14.00	14.00	0.00
ZMAX	9494250	18.00	18.00	0.00
ZMAX	9494190	18.50	18.50	0.00
ZMAX	100043	99.00	99.00	0.00
ZMAX	100044	99.00	99.00	0.00
ZMAX	100045	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100047	99.00	99.00	0.00
ZMAX	100048	99.00	99.00	0.00
ZMAX	100049	99.00	99.00	0.00
ZMAX	100050	99.00	99.00	0.00
ZMAX	100051	99.00	99.00	0.00
ZMAX	100052	99.00	99.00	0.00
ZMAX	100053	99.00	99.00	0.00
ZMAX	100054	99.00	99.00	0.00
ZMAX	100055	99.00	99.00	0.00
ZMAX	100056	99.00	99.00	0.00
ZMAX	100057	99.00	99.00	0.00
ZMAX	100058	99.00	99.00	0.00
ZMAX	100059	99.00	99.00	0.00
ZMAX	100060	99.00	99.00	0.00
ZMAX	100061	99.00	99.00	0.00
ZMAX	100062	99.00	99.00	0.00
ZMAX	100063	99.00	99.00	0.00
ZMAX	100064	99.00	99.00	0.00
ZMAX	100065	99.00	99.00	0.00
ZMAX	100066	99.00	99.00	0.00
ZMAX	100067	99.00	99.00	0.00
ZMAX	100068	99.00	99.00	0.00
ZMAX	100069	99.00	99.00	0.00
ZMAX	100070	99.00	99.00	0.00
ZMAX	100071	99.00	99.00	0.00
ZMAX	100072	99.00	99.00	0.00
ZMAX	100073	99.00	99.00	0.00
ZMAX	100074	99.00	99.00	0.00
ZMAX	100075	99.00	99.00	0.00
ZMAX	100076	99.00	99.00	0.00
ZMAX	100077	99.00	99.00	0.00
ZMAX	100078	99.00	99.00	0.00
ZMAX	100079	99.00	99.00	0.00
ZMAX	100080	99.00	99.00	0.00
ZMAX	100081	99.00	99.00	0.00
ZMAX	100082	99.00	99.00	0.00

ALTERNATIVE 6 25-YEAR 24-HOUR

ZMAX	100083	99.00	99.00	0.00
ZMAX	100084	99.00	99.00	0.00
ZMAX	100085	99.00	99.00	0.00
ZMAX	100086	99.00	99.00	0.00
ZMAX	100087	99.00	99.00	0.00
ZMAX	100088	99.00	99.00	0.00
ZMAX	100089	99.00	99.00	0.00
ZMAX	700010	25.96	43.64	130.22

Alternative 7 East Lake Outfall

ALTERNATIVE 7 5-YEAR 24-HOUR

	JUNC ID	INVT	Z_MAX	T_MAX
ZMAX	490000	24.23	26.46	0.00
ZMAX	490004	26.46	27.84	25.85
ZMAX	490002	20.93	26.14	29.05
ZMAX	490008	27.00	28.09	29.87
ZMAX	490010	26.16	28.19	39.67
ZMAX	490020	24.36	28.20	26.73
ZMAX	490030	26.46	28.14	25.25
ZMAX	490040	29.00	29.90	26.57
ZMAX	490050	25.16	28.39	15.43
ZMAX	490070	25.96	29.13	26.62
ZMAX	490071	29.00	29.91	14.60
ZMAX	490072	27.00	28.02	27.30
ZMAX	490073	30.00	32.31	14.45
ZMAX	490080	27.66	29.13	27.27
ZMAX	490090	28.00	30.71	27.40
ZMAX	490100	29.00	29.69	14.10
ZMAX	490110	26.16	29.70	25.18
ZMAX	490120	30.64	33.01	69.37
ZMAX	490130	28.96	33.02	69.32
ZMAX	490140	29.26	31.53	240.00
ZMAX	490141	31.00	32.13	26.37
ZMAX	490150	29.89	33.27	67.15
ZMAX	490160	29.77	34.52	59.60
ZMAX	490170	35.00	38.56	26.23
ZMAX	490180	32.66	37.49	26.72
ZMAX	490181	33.75	37.49	26.82
ZMAX	490200	36.66	38.56	26.23
ZMAX	490210	36.29	38.35	0.00
ZMAX	490211	39.00	40.60	17.20
ZMAX	490220	40.04	42.02	15.35
ZMAX	490221	42.00	44.50	30.53
ZMAX	490230	39.95	40.97	25.65
ZMAX	490240	26.36	30.28	24.42
ZMAX	490250	29.00	32.36	21.48
ZMAX	490251	33.00	34.78	29.83
ZMAX	490260	31.16	33.28	16.17
ZMAX	490261	34.00	36.08	13.83
ZMAX	490263	34.00	35.25	28.05
ZMAX	490264	33.00	34.83	24.37
ZMAX	490266	34.00	35.80	16.42
ZMAX	490270	35.00	37.74	14.40
ZMAX	490280	32.70	34.78	29.83
ZMAX	490281	32.70	34.78	29.75
ZMAX	490290	31.00	34.39	16.30
ZMAX	490300	31.86	33.17	13.50
ZMAX	490310	33.00	36.26	18.32
ZMAX	490320	34.00	37.76	20.60
ZMAX	490321	36.00	38.24	37.90
ZMAX	490330	37.00	38.66	27.77
ZMAX	490340	35.00	37.83	14.20
ZMAX	490350	36.00	38.67	25.85
ZMAX	490370	33.96	35.92	25.73
ZMAX	490375	35.00	38.08	57.15
ZMAX	490390	34.56	37.97	24.93
ZMAX	490391	36.80	37.26	26.05
ZMAX	490392	36.40	36.82	15.00
ZMAX	490400	37.00	38.89	25.85
ZMAX	490401	37.00	39.37	25.98
ZMAX	490410	35.46	38.08	57.08
ZMAX	490411	36.00	38.08	57.08
ZMAX	490420	35.00	40.20	50.95
ZMAX	490421	39.00	39.74	28.53
ZMAX	490422	39.00	41.05	25.17
ZMAX	490425	38.00	40.20	51.63
ZMAX	490430	35.47	40.69	26.00
ZMAX	490440	40.00	42.84	26.75

ALTERNATIVE 7 5-YEAR 24-HOUR

ZMAX	490450	39.00	40.58	57.92
ZMAX	490451	39.00	40.14	29.65
ZMAX	490453	39.00	40.14	31.75
ZMAX	490455	39.00	40.60	21.83
ZMAX	490460	43.00	45.73	27.53
ZMAX	490470	40.00	41.74	25.50
ZMAX	490480	39.67	42.00	0.00
ZMAX	490490	40.38	42.30	19.83
ZMAX	490500	41.00	44.61	59.72
ZMAX	490510	49.00	50.73	17.83
ZMAX	490520	43.47	48.11	27.60
ZMAX	490530	51.00	54.16	83.12
ZMAX	490535	56.47	57.94	16.12
ZMAX	490540	56.00	58.17	16.05
ZMAX	490550	48.00	49.28	17.52
ZMAX	490555	48.07	51.02	13.92
ZMAX	490560	49.00	49.74	16.27
ZMAX	490580	35.47	40.81	25.98
ZMAX	490590	48.37	49.31	26.27
ZMAX	490600	42.54	44.45	25.78
ZMAX	490610	39.77	41.38	27.08
ZMAX	490612	42.00	44.20	27.75
ZMAX	490620	41.70	42.88	16.80
ZMAX	490621	44.00	45.18	27.30
ZMAX	490630	42.17	44.53	20.53
ZMAX	490637	41.53	42.43	14.78
ZMAX	490638	44.12	44.50	24.82
ZMAX	490639	48.72	49.21	14.53
ZMAX	490640	37.57	40.86	25.32
ZMAX	490641	44.00	46.73	24.48
ZMAX	490642	45.16	47.24	16.32
ZMAX	490643	39.87	44.93	16.70
ZMAX	490644	47.67	49.21	14.60
ZMAX	490645	48.67	51.27	24.60
ZMAX	490646	41.53	47.31	14.48
ZMAX	490650	43.27	45.09	19.27
ZMAX	490651	48.16	50.18	16.65
ZMAX	490652	43.47	46.22	13.98
ZMAX	490654	46.00	48.13	26.82
ZMAX	490655	46.55	48.83	14.98
ZMAX	490659	45.57	48.11	14.32
ZMAX	490660	39.87	46.11	14.37
ZMAX	490661	45.57	49.72	16.63
ZMAX	490670	45.37	48.30	14.27
ZMAX	490675	41.87	48.11	14.30
ZMAX	490680	47.11	49.55	16.67
ZMAX	490690	45.49	48.39	14.18
ZMAX	490700	53.74	58.68	29.58
ZMAX	490710	47.96	52.09	27.78
ZMAX	490711	52.00	54.43	21.28
ZMAX	490720	50.00	52.14	27.97
ZMAX	490730	50.23	52.56	25.45
ZMAX	490740	49.64	53.25	17.57
ZMAX	490742	58.00	59.32	14.05
ZMAX	490743	48.76	53.27	18.00
ZMAX	490744	49.87	53.27	18.00
ZMAX	490745	57.00	59.15	29.72
ZMAX	490746	57.00	59.23	26.50
ZMAX	490750	51.30	53.51	16.03
ZMAX	490751	55.00	56.23	25.60
ZMAX	490760	50.95	53.93	20.07
ZMAX	490770	51.91	55.20	27.10
ZMAX	490771	55.00	56.06	25.68
ZMAX	490772	56.00	57.26	26.22
ZMAX	490773	56.00	58.54	25.82
ZMAX	490776	56.00	57.12	27.18
ZMAX	490779	55.00	57.10	24.95

ALTERNATIVE 7 5-YEAR 24-HOUR

ZMAX	490780	54.21	57.06	20.42
ZMAX	490790	53.17	55.16	41.82
ZMAX	490791	56.00	57.79	27.22
ZMAX	490792	56.00	57.63	26.03
ZMAX	490794	56.00	57.24	29.38
ZMAX	490795	56.00	56.98	27.40
ZMAX	490800	53.17	55.62	14.60
ZMAX	490801	55.00	57.11	25.08
ZMAX	490802	56.00	57.35	25.72
ZMAX	490803	57.00	57.89	28.22
ZMAX	490804	56.00	57.89	27.72
ZMAX	490900	53.67	55.16	41.88
ZMAX	491010	22.06	24.94	14.25
ZMAX	491019	26.44	27.43	17.70
ZMAX	491020	26.14	28.53	16.78
ZMAX	491021	26.00	28.54	17.08
ZMAX	491022	27.07	28.53	16.93
ZMAX	491040	23.16	25.04	14.20
ZMAX	491041	26.86	29.01	13.92
ZMAX	491042	27.66	28.61	16.12
ZMAX	491043	27.17	28.39	16.33
ZMAX	491044	27.66	28.94	13.97
ZMAX	491060	25.96	28.98	116.38
ZMAX	491080	25.66	29.01	116.38
ZMAX	491100	28.96	30.31	96.63
ZMAX	491102	29.00	31.08	13.28
ZMAX	491120	27.86	30.30	78.73
ZMAX	491121	29.25	32.22	42.45
ZMAX	491122	32.00	33.30	13.50
ZMAX	491123	32.00	33.51	17.65
ZMAX	491140	29.62	32.27	42.22
ZMAX	491160	30.66	32.57	17.13
ZMAX	491180	32.00	34.31	25.73
ZMAX	491200	34.46	36.56	14.65
ZMAX	491220	36.97	38.07	19.53
ZMAX	491221	33.05	36.27	14.00
ZMAX	491222	36.80	38.34	13.12
ZMAX	491223	34.39	36.28	13.98
ZMAX	491240	31.00	32.45	27.82
ZMAX	491260	29.00	31.14	86.48
ZMAX	491280	29.00	31.31	84.15
ZMAX	491285	30.77	38.29	14.47
ZMAX	491300	29.00	31.31	84.15
ZMAX	491302	33.00	36.22	18.52
ZMAX	491320	32.90	36.23	14.03
ZMAX	491340	29.17	31.70	35.60
ZMAX	491344	36.00	37.90	27.73
ZMAX	491342	31.36	34.00	14.92
ZMAX	491360	33.97	36.54	16.25
ZMAX	491380	31.36	35.21	17.23
ZMAX	491382	33.00	33.42	14.47
ZMAX	491384	30.00	32.09	26.75
ZMAX	491387	34.17	38.94	50.02
ZMAX	491388	34.17	40.79	26.65
ZMAX	491390	36.63	38.94	49.30
ZMAX	491391	35.17	38.97	49.33
ZMAX	491393	42.00	44.71	19.67
ZMAX	491394	36.67	40.02	17.42
ZMAX	491395	35.27	38.97	49.38
ZMAX	491396	38.00	40.30	27.32
ZMAX	491397	32.07	38.93	49.93
ZMAX	491398	42.00	44.02	41.60
ZMAX	491399	38.00	40.79	26.65
ZMAX	491400	33.27	35.12	13.50
ZMAX	491401	36.77	42.20	14.83
ZMAX	491402	32.17	38.94	49.32
ZMAX	491404	38.96	40.79	27.17

ALTERNATIVE 7 5-YEAR 24-HOUR

ZMAX	491406	36.77	40.02	17.37
ZMAX	491407	32.17	38.93	50.17
ZMAX	491392	43.00	47.25	27.48
ZMAX	491403	45.00	48.01	29.82
ZMAX	491440	38.17	39.66	27.67
ZMAX	491441	38.54	39.66	27.65
ZMAX	491460	30.71	35.80	24.70
ZMAX	491465	31.27	35.83	25.22
ZMAX	491480	33.87	36.50	13.55
ZMAX	491500	30.00	35.85	26.38
ZMAX	491501	31.17	35.84	26.03
ZMAX	491502	36.00	37.76	27.88
ZMAX	491520	38.15	40.01	13.38
ZMAX	491540	41.00	43.84	27.87
ZMAX	491541	42.00	45.46	27.55
ZMAX	491452	42.00	43.55	26.18
ZMAX	491453	37.18	39.41	13.48
ZMAX	491560	41.00	41.59	28.95
ZMAX	491561	38.00	41.35	29.92
ZMAX	491562	44.00	44.85	31.13
ZMAX	491563	39.00	41.35	29.92
ZMAX	491580	36.55	37.57	28.97
ZMAX	491600	39.73	41.37	240.00
ZMAX	491620	45.57	46.63	28.27
ZMAX	491621	48.00	50.20	27.60
ZMAX	490232	44.00	46.41	16.42
ZMAX	490431	41.00	44.07	26.53
ZMAX	490449	41.00	43.29	17.73
ZMAX	490457	39.00	40.61	22.20
ZMAX	490491	47.00	48.42	29.25
ZMAX	490492	47.00	50.25	29.27
ZMAX	490501	46.00	48.82	14.10
ZMAX	490511	48.00	49.65	28.08
ZMAX	490561	57.00	58.11	27.78
ZMAX	490581	44.00	45.94	15.03
ZMAX	490582	50.00	51.82	18.60
ZMAX	490584	50.00	51.51	26.03
ZMAX	490587	53.00	56.61	16.95
ZMAX	490701	54.00	58.55	20.10
ZMAX	490702	57.00	60.42	25.63
ZMAX	490703	53.74	55.00	14.12
ZMAX	490704	56.00	60.39	14.15
ZMAX	490713	52.00	53.82	29.12
ZMAX	490741	58.00	58.74	28.33
ZMAX	490762	56.00	58.18	27.28
ZMAX	490781	58.00	61.75	17.97
ZMAX	491274	31.22	38.40	14.72
ZMAX	491284	33.92	36.06	14.38
ZMAX	491389	39.00	40.35	27.20
ZMAX	491700	23.00	26.12	24.52
ZMAX	491701	9.70	24.05	37.10
ZMAX	491702	55.00	56.74	35.83
ZMAX	491703	25.00	27.31	18.43
ZMAX	491704	56.00	58.66	16.53
ZMAX	491705	55.80	56.74	35.83
ZMAX	491706	48.90	51.25	27.72
ZMAX	491707	45.00	46.40	30.12
ZMAX	491708	36.00	38.27	28.08
ZMAX	491709	37.00	39.09	16.23
ZMAX	491710	27.00	28.65	16.65
ZMAX	491711	24.00	25.42	40.30
ZMAX	491712	30.33	33.33	29.95
ZMAX	491713	30.00	33.34	30.13
ZMAX	491714	31.00	32.02	21.07
ZMAX	491715	40.17	41.74	25.38
ZMAX	491716	30.00	34.36	28.57
ZMAX	491717	52.00	55.10	26.70

ALTERNATIVE 7 5-YEAR 24-HOUR

ZMAX	491718	34.00	36.29	15.75
ZMAX	491719	42.00	45.70	28.52
ZMAX	491720	38.00	40.31	16.47
ZMAX	491721	38.00	39.98	25.93
ZMAX	491722	39.00	39.57	16.95
ZMAX	491723	29.00	37.08	39.95
ZMAX	491724	29.00	34.36	28.88
ZMAX	491725	33.00	33.95	16.62
ZMAX	491728	30.00	34.61	27.77
ZMAX	491729	27.00	30.19	27.33
ZMAX	491730	26.00	29.17	22.00
ZMAX	491737	38.00	38.53	16.62
ZMAX	491740	37.00	38.49	16.32
ZMAX	491745	37.00	38.92	21.35
ZMAX	491746	37.00	38.72	28.12
ZMAX	491750	44.00	45.43	27.72
ZMAX	491753	49.00	50.77	29.85
ZMAX	490574	41.77	45.22	15.65
ZMAX	491405	42.00	44.34	28.37
ZMAX	490714	52.00	54.09	17.12
ZMAX	490753	51.00	53.78	28.50
ZMAX	491224	39.00	41.41	28.83
ZMAX	491225	41.50	43.41	14.97
ZMAX	491759	39.00	40.31	21.92
ZMAX	491760	39.00	40.27	22.13
ZMAX	491764	38.00	40.00	20.45
ZMAX	491768	38.00	39.63	22.73
ZMAX	499999	35.85	39.59	22.73
ZMAX	499998	35.80	39.58	22.73
ZMAX	499997	35.00	35.80	22.73
ZMAX	491002	30.84	33.34	30.13
ZMAX	491001	28.00	33.34	30.08
ZMAX	100000	99.00	99.00	0.00
ZMAX	100001	99.00	99.00	0.00
ZMAX	100002	99.00	99.00	0.00
ZMAX	100003	99.00	99.00	0.00
ZMAX	100004	99.00	99.00	0.00
ZMAX	100005	99.00	99.00	0.00
ZMAX	100006	99.00	99.00	0.00
ZMAX	100007	99.00	99.00	0.00
ZMAX	100008	99.00	99.00	0.00
ZMAX	100009	99.00	99.00	0.00
ZMAX	100010	99.00	99.00	0.00
ZMAX	100011	99.00	99.00	0.00
ZMAX	100012	99.00	99.00	0.00
ZMAX	100013	99.00	99.00	0.00
ZMAX	100014	99.00	99.00	0.00
ZMAX	100015	99.00	99.00	0.00
ZMAX	100016	99.00	99.00	0.00
ZMAX	100017	99.00	99.00	0.00
ZMAX	100018	99.00	99.00	0.00
ZMAX	100019	99.00	99.00	0.00
ZMAX	100020	99.00	99.00	0.00
ZMAX	100021	99.00	99.00	0.00
ZMAX	100022	99.00	99.00	0.00
ZMAX	100023	99.00	99.00	0.00
ZMAX	100024	99.00	99.00	0.00
ZMAX	100025	99.00	99.00	0.00
ZMAX	100026	99.00	99.00	0.00
ZMAX	100027	99.00	99.00	0.00
ZMAX	100028	99.00	99.00	0.00
ZMAX	100029	99.00	99.00	0.00
ZMAX	100030	99.00	99.00	0.00
ZMAX	100031	99.00	99.00	0.00
ZMAX	100032	99.00	99.00	0.00
ZMAX	100033	99.00	99.00	0.00
ZMAX	100034	99.00	99.00	0.00

ALTERNATIVE 7 5-YEAR 24-HOUR

ZMAX	100035	99.00	99.00	0.00
ZMAX	100036	99.00	99.00	0.00
ZMAX	100037	99.00	99.00	0.00
ZMAX	100038	99.00	99.00	0.00
ZMAX	100039	99.00	99.00	0.00
ZMAX	100040	99.00	99.00	0.00
ZMAX	493010	17.00	22.66	25.45
ZMAX	493020	20.00	22.62	27.23
ZMAX	493030	18.00	24.41	13.30
ZMAX	493040	17.00	22.11	21.47
ZMAX	493060	21.00	21.45	13.35
ZMAX	493070	19.00	25.64	13.65
ZMAX	493090	18.00	22.29	25.08
ZMAX	493100	20.00	21.11	12.67
ZMAX	493110	18.00	19.93	12.95
ZMAX	493120	18.00	19.99	0.00
ZMAX	493130	17.00	20.08	13.00
ZMAX	493140	16.00	18.43	13.70
ZMAX	493150	16.00	19.33	13.83
ZMAX	493180	18.00	24.08	14.90
ZMAX	493185	19.00	23.23	18.43
ZMAX	493190	17.00	19.21	13.03
ZMAX	493195	17.00	20.06	13.65
ZMAX	493200	18.00	19.64	14.00
ZMAX	493210	18.00	19.18	13.03
ZMAX	493215	19.00	20.75	25.27
ZMAX	493220	16.00	18.96	13.32
ZMAX	493230	15.50	18.43	13.70
ZMAX	493240	16.00	19.06	14.82
ZMAX	493250	17.00	24.08	14.90
ZMAX	493260	21.00	24.08	14.97
ZMAX	493270	19.00	24.07	14.97
ZMAX	493280	19.00	23.06	13.03
ZMAX	493290	19.00	22.23	15.38
ZMAX	493310	17.00	21.71	29.07
ZMAX	493320	17.00	19.80	0.00
ZMAX	493330	17.00	19.63	14.03
ZMAX	493340	16.33	19.62	14.00
ZMAX	493350	15.50	17.69	13.17
ZMAX	493360	13.00	18.00	0.00
ZMAX	493370	14.61	17.75	13.97
ZMAX	493380	14.50	17.08	17.00
ZMAX	493390	14.50	17.86	13.77
ZMAX	493400	13.50	17.08	16.98
ZMAX	493410	12.50	17.08	16.98
ZMAX	493420	13.50	16.29	0.03
ZMAX	493430	12.44	15.97	0.08
ZMAX	493440	15.50	18.71	28.12
ZMAX	493450	18.00	18.84	14.95
ZMAX	493470	16.00	18.83	14.97
ZMAX	493480	15.50	18.84	14.95
ZMAX	493500	12.27	16.79	14.65
ZMAX	493505	12.27	16.26	17.22
ZMAX	493520	11.76	14.57	17.10
ZMAX	493525	11.00	14.46	16.90
ZMAX	493530	14.50	17.13	16.60
ZMAX	493535	15.00	17.13	16.60
ZMAX	493540	13.50	15.99	0.00
ZMAX	493545	9.65	14.41	16.95
ZMAX	493550	14.50	15.20	12.70
ZMAX	493555	13.50	14.81	12.50
ZMAX	494010	24.80	26.00	0.00
ZMAX	494020	22.90	25.55	12.93
ZMAX	494025	20.00	21.16	12.95
ZMAX	494030	22.00	22.69	13.00
ZMAX	494040	19.00	20.45	13.07
ZMAX	494045	18.70	20.44	13.07

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ZMAX	494050	20.00	25.00	0.00
ZMAX	494060	25.00	26.00	0.00
ZMAX	494070	18.00	19.71	13.70
ZMAX	494072	19.00	22.01	24.17
ZMAX	494074	20.00	21.05	13.12
ZMAX	494076	19.00	21.05	12.68
ZMAX	494078	21.00	22.12	12.85
ZMAX	494080	18.00	20.11	13.10
ZMAX	494100	17.00	19.06	15.18
ZMAX	494110	15.29	16.78	12.70
ZMAX	494120	18.00	19.22	13.35
ZMAX	494130	17.00	18.20	14.80
ZMAX	494140	14.50	18.19	14.82
ZMAX	494150	15.00	16.99	0.00
ZMAX	494170	18.00	19.72	13.67
ZMAX	494180	17.00	19.60	15.65
ZMAX	494185	17.00	19.56	13.80
ZMAX	494190	17.00	18.34	13.85
ZMAX	494200	15.00	16.97	0.03
ZMAX	494205	17.00	18.99	15.12
ZMAX	494210	14.87	18.80	0.00
ZMAX	494220	15.75	18.22	0.02
ZMAX	494230	16.00	18.09	0.03
ZMAX	494240	15.71	18.22	13.45
ZMAX	494250	16.70	17.98	0.00
ZMAX	495010	20.00	23.20	0.00
ZMAX	495020	15.50	18.71	28.10
ZMAX	495030	15.50	18.71	28.10
ZMAX	495035	19.00	20.34	24.98
ZMAX	495038	17.00	18.10	12.90
ZMAX	495040	16.00	18.63	12.92
ZMAX	495045	15.00	15.77	12.73
ZMAX	495050	15.50	18.34	24.92
ZMAX	495055	15.50	16.79	12.95
ZMAX	495060	14.80	15.76	12.73
ZMAX	495065	14.50	16.15	13.05
ZMAX	495070	11.50	13.30	20.17
ZMAX	495075	11.50	12.60	24.40
ZMAX	495080	13.18	13.99	0.00
ZMAX	495085	13.00	15.02	20.35
ZMAX	495090	11.42	12.99	14.20
ZMAX	495100	15.00	18.15	16.62
ZMAX	495110	14.50	17.04	12.75
ZMAX	495120	13.00	14.12	13.35
ZMAX	495125	14.42	15.96	14.05
ZMAX	495140	14.50	16.55	17.73
ZMAX	495145	14.50	16.39	240.00
ZMAX	495150	13.00	14.12	13.35
ZMAX	495152	12.50	15.08	25.55
ZMAX	495154	12.50	15.43	25.97
ZMAX	495155	12.50	15.43	25.97
ZMAX	495156	12.50	13.49	0.00
ZMAX	495160	1.50	8.56	24.52
ZMAX	495162	13.50	14.84	25.57
ZMAX	495165	13.50	15.49	25.70
ZMAX	495170	8.00	11.77	24.70
ZMAX	495180	10.45	12.41	0.00
ZMAX	495210	12.50	13.90	25.12
ZMAX	495215	12.50	14.12	13.35
ZMAX	495230	8.82	11.69	13.03
ZMAX	495235	10.50	13.33	24.80
ZMAX	495240	8.50	10.10	13.85
ZMAX	495260	13.00	15.50	23.82
ZMAX	495270	12.50	14.11	13.35
ZMAX	495275	11.50	13.10	13.50
ZMAX	495280	10.90	11.14	13.52
ZMAX	495300	13.94	15.46	14.30

ALTERNATIVE 7 5-YEAR 24-HOUR

ZMAX	495302	13.90	15.41	14.35
ZMAX	495304	13.31	15.27	13.30
ZMAX	495306	12.73	14.11	14.57
ZMAX	495308	12.18	14.02	14.85
ZMAX	495310	11.49	12.96	13.53
ZMAX	495312	10.92	12.94	13.42
ZMAX	495314	10.43	12.62	24.43
ZMAX	495316	11.80	14.11	12.53
ZMAX	495320	9.75	12.62	24.42
ZMAX	495322	9.64	14.08	17.45
ZMAX	495324	9.44	13.88	17.73
ZMAX	495326	9.30	13.42	19.37
ZMAX	495328	9.43	13.30	20.18
ZMAX	495330	9.20	13.30	20.17
ZMAX	495332	9.02	13.30	20.08
ZMAX	495334	8.90	13.04	21.07
ZMAX	495336	8.72	12.61	24.38
ZMAX	495338	8.53	12.60	24.40
ZMAX	495340	8.40	12.58	24.38
ZMAX	495342	8.23	12.57	24.38
ZMAX	495344	8.04	11.71	24.75
ZMAX	495346	7.85	11.64	13.10
ZMAX	495348	7.66	11.52	13.28
ZMAX	495350	7.47	10.36	13.63
ZMAX	495352	7.34	10.10	13.85
ZMAX	495354	7.26	10.16	13.73
ZMAX	495356	7.19	10.07	13.87
ZMAX	496010	14.50	16.24	0.12
ZMAX	496020	14.50	18.79	0.00
ZMAX	496030	14.50	16.32	0.02
ZMAX	496060	16.60	16.75	12.83
ZMAX	496065	14.00	16.28	0.10
ZMAX	496070	14.00	16.25	0.10
ZMAX	496080	14.20	17.99	0.00
ZMAX	496090	14.00	17.99	0.00
ZMAX	496100	12.50	15.91	0.07
ZMAX	496110	11.00	15.44	14.68
ZMAX	496120	13.00	15.09	14.60
ZMAX	496125	12.00	14.10	19.67
ZMAX	496130	13.00	15.37	14.70
ZMAX	496150	14.00	15.41	14.72
ZMAX	496160	11.00	14.10	19.67
ZMAX	496170	12.00	15.43	14.70
ZMAX	496175	12.00	14.85	14.63
ZMAX	496180	11.00	13.17	14.25
ZMAX	496190	11.00	13.17	14.30
ZMAX	496200	10.50	11.31	14.30
ZMAX	496232	16.00	18.00	0.00
ZMAX	496234	14.00	16.36	0.15
ZMAX	496235	15.00	15.41	0.12
ZMAX	496240	14.28	15.85	0.03
ZMAX	496245	13.50	15.18	0.12
ZMAX	496260	13.50	15.05	0.28
ZMAX	496270	12.50	13.68	0.27
ZMAX	496280	9.50	12.15	14.28
ZMAX	496310	10.50	11.37	14.30
ZMAX	496320	10.50	11.22	14.27
ZMAX	496340	4.43	10.06	14.62
ZMAX	496350	8.50	9.88	25.07
ZMAX	496360	7.50	8.97	25.27
ZMAX	496370	6.50	8.18	14.23
ZMAX	496380	5.50	8.03	15.77
ZMAX	496390	4.41	8.10	15.68
ZMAX	496395	4.50	7.89	16.13
ZMAX	496400	6.50	8.03	15.73
ZMAX	496410	-0.65	7.89	16.13
ZMAX	496420	3.50	6.87	18.18

ALTERNATIVE 7 5-YEAR 24-HOUR

ZMAX	496430	5.50	9.04	14.10
ZMAX	496440	5.50	7.82	27.10
ZMAX	496450	3.50	7.82	27.10
ZMAX	496460	5.50	9.98	26.00
ZMAX	496470	3.00	7.30	18.18
ZMAX	496480	6.50	8.35	25.10
ZMAX	496485	7.50	10.67	25.40
ZMAX	496490	3.50	8.27	24.98
ZMAX	496500	6.50	11.00	0.00
ZMAX	496510	4.50	7.41	25.10
ZMAX	496515	4.50	7.97	16.62
ZMAX	496520	5.50	7.30	18.20
ZMAX	496530	5.50	7.30	18.20
ZMAX	496540	6.50	7.30	18.18
ZMAX	496545	4.00	7.30	18.18
ZMAX	496550	4.00	7.30	18.18
ZMAX	496560	3.00	7.30	18.18
ZMAX	496570	5.50	7.30	18.20
ZMAX	496580	7.50	10.88	24.98
ZMAX	496590	4.50	7.89	16.13
ZMAX	496600	-1.88	7.29	18.12
ZMAX	496610	4.50	7.18	13.22
ZMAX	496620	4.50	7.17	13.23
ZMAX	497010	11.00	13.88	13.82
ZMAX	497020	3.50	9.94	13.95
ZMAX	497025	8.50	11.09	12.88
ZMAX	497035	6.50	10.20	13.87
ZMAX	497045	4.50	7.67	14.68
ZMAX	497050	3.50	7.66	14.70
ZMAX	497055	3.50	6.68	13.62
ZMAX	497065	1.88	5.10	14.30
ZMAX	497070	8.50	9.97	12.95
ZMAX	497080	2.06	6.03	0.00
ZMAX	497085	6.50	9.74	15.22
ZMAX	497086	6.32	10.07	13.88
ZMAX	497088	5.89	9.83	15.05
ZMAX	497090	4.32	9.73	15.20
ZMAX	497092	3.75	8.74	15.83
ZMAX	497094	2.75	8.31	15.97
ZMAX	497096	2.30	7.92	16.08
ZMAX	497098	1.85	7.80	16.12
ZMAX	497100	-0.16	6.20	16.10
ZMAX	497102	-1.57	5.61	15.00
ZMAX	497104	-2.19	5.47	15.03
ZMAX	497105	-1.00	5.46	15.03
ZMAX	497106	-1.37	4.76	18.32
ZMAX	497107	-2.07	4.73	18.38
ZMAX	497108	-0.37	4.72	18.45
ZMAX	497109	-4.75	4.80	18.43
ZMAX	497111	-3.66	4.72	18.38
ZMAX	497112	-3.66	4.94	18.45
ZMAX	497113	-5.33	5.17	18.37
ZMAX	497110	-0.19	7.02	25.12
ZMAX	497120	1.50	4.74	18.40
ZMAX	497122	4.50	5.42	13.18
ZMAX	497124	4.00	4.74	18.40
ZMAX	497130	-0.21	7.01	25.13
ZMAX	497140	4.00	6.50	0.00
ZMAX	497150	5.40	6.88	12.50
ZMAX	497160	-1.85	6.87	18.18
ZMAX	497161	-2.25	6.43	18.23
ZMAX	497162	-2.86	5.66	18.37
ZMAX	497170	-6.19	3.37	18.42
ZMAX	500010	6.94	10.77	12.72
ZMAX	500020	8.41	9.59	13.77
ZMAX	500025	6.13	9.70	12.83
ZMAX	500030	5.77	9.61	12.88

ALTERNATIVE 7 5-YEAR 24-HOUR

ZMAX	500040	5.07	9.44	12.97
ZMAX	500050	4.00	8.55	12.85
ZMAX	500110	7.43	10.42	12.73
ZMAX	500120	6.16	9.56	17.55
ZMAX	500130	8.00	10.81	13.42
ZMAX	500140	6.39	9.57	18.20
ZMAX	500210	4.00	9.58	18.47
ZMAX	500220	6.91	10.84	12.57
ZMAX	500300	5.00	9.92	12.78
ZMAX	9498000	-6.69	2.96	0.00
ZMAX	9496630	12.00	12.00	0.00
ZMAX	9493020	20.00	20.00	0.00
ZMAX	9493060	22.50	22.50	0.00
ZMAX	9493190	19.00	19.00	0.00
ZMAX	9493140	19.98	19.98	0.00
ZMAX	9493150	19.70	19.70	0.00
ZMAX	9493240	19.00	19.00	0.00
ZMAX	9495030	17.48	17.48	0.00
ZMAX	9495010	23.20	23.20	0.00
ZMAX	9495085	15.10	15.10	0.00
ZMAX	9495140	16.00	16.00	0.00
ZMAX	9495145	16.00	16.00	0.00
ZMAX	9496320	11.00	11.00	0.00
ZMAX	9496260	14.00	14.00	0.00
ZMAX	9494250	18.00	18.00	0.00
ZMAX	9494190	18.50	18.50	0.00
ZMAX	600000	1.00	6.87	24.60
ZMAX	600010	0.50	3.97	24.75
ZMAX	600020	0.00	2.55	24.75
ZMAX	600030	7.50	12.05	24.60
ZMAX	600040	2.00	10.63	24.57
ZMAX	600050	8.04	11.66	24.77
ZMAX	100043	99.00	99.00	0.00
ZMAX	100044	99.00	99.00	0.00
ZMAX	100045	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100047	99.00	99.00	0.00
ZMAX	100048	99.00	99.00	0.00
ZMAX	100049	99.00	99.00	0.00
ZMAX	100050	99.00	99.00	0.00
ZMAX	100051	99.00	99.00	0.00
ZMAX	100052	99.00	99.00	0.00
ZMAX	100053	99.00	99.00	0.00
ZMAX	100054	99.00	99.00	0.00
ZMAX	100055	99.00	99.00	0.00
ZMAX	100056	99.00	99.00	0.00
ZMAX	100057	99.00	99.00	0.00
ZMAX	100058	99.00	99.00	0.00
ZMAX	100059	99.00	99.00	0.00
ZMAX	100060	99.00	99.00	0.00
ZMAX	100061	99.00	99.00	0.00
ZMAX	100062	99.00	99.00	0.00
ZMAX	100063	99.00	99.00	0.00
ZMAX	100064	99.00	99.00	0.00
ZMAX	100065	99.00	99.00	0.00
ZMAX	100066	99.00	99.00	0.00
ZMAX	100067	99.00	99.00	0.00
ZMAX	100068	99.00	99.00	0.00
ZMAX	100069	99.00	99.00	0.00
ZMAX	100070	99.00	99.00	0.00
ZMAX	100071	99.00	99.00	0.00
ZMAX	100072	99.00	99.00	0.00
ZMAX	100073	99.00	99.00	0.00
ZMAX	100074	99.00	99.00	0.00
ZMAX	100075	99.00	99.00	0.00
ZMAX	100076	99.00	99.00	0.00

ALTERNATIVE 7 5-YEAR 24-HOUR

ZMAX	100077	99.00	99.00	0.00
ZMAX	100078	99.00	99.00	0.00
ZMAX	100079	99.00	99.00	0.00
ZMAX	100080	99.00	99.00	0.00
ZMAX	100081	99.00	99.00	0.00
ZMAX	100082	99.00	99.00	0.00
ZMAX	100083	99.00	99.00	0.00
ZMAX	100084	99.00	99.00	0.00
ZMAX	100085	99.00	99.00	0.00
ZMAX	100086	99.00	99.00	0.00
ZMAX	100087	99.00	99.00	0.00
ZMAX	100088	99.00	99.00	0.00
ZMAX	100089	99.00	99.00	0.00

ALTERNATIVE 7 25-YEAR 24-HOUR

	JUNC ID	INVT	Z_MAX	T_MAX
ZMAX	490000	24.23	28.37	48.58
ZMAX	490004	26.46	28.52	23.28
ZMAX	490002	20.93	28.37	48.57
ZMAX	490008	27.00	28.75	30.02
ZMAX	490010	26.16	28.77	27.03
ZMAX	490020	24.36	28.66	32.30
ZMAX	490030	26.46	28.67	26.00
ZMAX	490040	29.00	30.43	26.53
ZMAX	490050	25.16	28.78	15.58
ZMAX	490070	25.96	29.85	23.03
ZMAX	490071	29.00	30.10	14.08
ZMAX	490072	27.00	28.61	27.35
ZMAX	490073	30.00	32.38	13.73
ZMAX	490080	27.66	30.09	20.65
ZMAX	490090	28.00	31.09	17.40
ZMAX	490100	29.00	29.86	23.15
ZMAX	490110	26.16	30.42	21.98
ZMAX	490120	30.64	33.28	88.05
ZMAX	490130	28.96	33.31	88.03
ZMAX	490140	29.26	31.82	240.00
ZMAX	490141	31.00	32.77	26.40
ZMAX	490150	29.89	34.11	86.20
ZMAX	490160	29.77	35.55	76.17
ZMAX	490170	35.00	38.95	18.53
ZMAX	490180	32.66	38.72	29.67
ZMAX	490181	33.75	38.72	29.78
ZMAX	490200	36.66	38.92	14.87
ZMAX	490210	36.29	38.67	18.67
ZMAX	490211	39.00	40.68	15.37
ZMAX	490220	40.04	42.87	15.73
ZMAX	490221	42.00	45.25	24.38
ZMAX	490230	39.95	41.46	25.25
ZMAX	490240	26.36	31.08	20.87
ZMAX	490250	29.00	33.11	18.93
ZMAX	490251	33.00	35.73	30.07
ZMAX	490260	31.16	34.72	19.57
ZMAX	490261	34.00	36.25	13.68
ZMAX	490263	34.00	35.98	28.08
ZMAX	490264	33.00	35.25	19.08
ZMAX	490266	34.00	36.12	16.08
ZMAX	490270	35.00	38.99	14.97
ZMAX	490280	32.70	35.73	30.07
ZMAX	490281	32.70	35.73	29.90
ZMAX	490290	31.00	34.93	16.10
ZMAX	490300	31.86	34.84	17.57
ZMAX	490310	33.00	37.13	17.63
ZMAX	490320	34.00	37.98	16.77
ZMAX	490321	36.00	38.60	24.48
ZMAX	490330	37.00	38.74	15.72
ZMAX	490340	35.00	37.94	15.93
ZMAX	490350	36.00	38.77	15.67
ZMAX	490370	33.96	36.43	57.00
ZMAX	490375	35.00	38.61	54.25
ZMAX	490390	34.56	38.71	19.92
ZMAX	490391	36.80	38.00	21.57
ZMAX	490392	36.40	37.07	15.38
ZMAX	490400	37.00	39.01	16.07
ZMAX	490401	37.00	39.71	25.98
ZMAX	490410	35.46	38.61	54.18
ZMAX	490411	36.00	38.61	54.32
ZMAX	490420	35.00	40.76	48.58
ZMAX	490421	39.00	40.16	28.50
ZMAX	490422	39.00	41.18	16.93
ZMAX	490425	38.00	40.76	49.17
ZMAX	490430	35.47	41.32	28.23
ZMAX	490440	40.00	43.49	26.10

ALTERNATIVE 7 25-YEAR 24-HOUR

ZMAX	490450	39.00	40.86	25.57
ZMAX	490451	39.00	40.57	63.08
ZMAX	490453	39.00	40.57	63.08
ZMAX	490455	39.00	40.77	18.40
ZMAX	490460	43.00	46.56	27.58
ZMAX	490470	40.00	42.50	36.25
ZMAX	490480	39.67	42.50	36.18
ZMAX	490490	40.38	42.78	21.83
ZMAX	490500	41.00	45.04	35.87
ZMAX	490510	49.00	51.19	17.32
ZMAX	490520	43.47	49.71	24.33
ZMAX	490530	51.00	54.87	82.32
ZMAX	490535	56.47	58.48	15.63
ZMAX	490540	56.00	58.76	15.58
ZMAX	490550	48.00	49.84	16.68
ZMAX	490555	48.07	52.12	13.70
ZMAX	490560	49.00	50.03	16.08
ZMAX	490580	35.47	41.48	28.00
ZMAX	490590	48.37	49.84	25.68
ZMAX	490600	42.54	44.75	15.92
ZMAX	490610	39.77	42.47	26.28
ZMAX	490612	42.00	44.27	15.28
ZMAX	490620	41.70	43.14	15.70
ZMAX	490621	44.00	45.43	18.08
ZMAX	490630	42.17	45.13	22.68
ZMAX	490637	41.53	43.06	14.32
ZMAX	490638	44.12	44.62	24.58
ZMAX	490639	48.72	49.71	15.05
ZMAX	490640	37.57	41.57	26.95
ZMAX	490641	44.00	48.12	24.27
ZMAX	490642	45.16	48.40	16.60
ZMAX	490643	39.87	45.63	16.23
ZMAX	490644	47.67	49.63	15.20
ZMAX	490645	48.67	51.72	14.87
ZMAX	490646	41.53	47.77	14.02
ZMAX	490650	43.27	45.90	17.90
ZMAX	490651	48.16	50.96	16.93
ZMAX	490652	43.47	46.34	14.20
ZMAX	490654	46.00	48.44	17.00
ZMAX	490655	46.55	48.90	14.03
ZMAX	490659	45.57	49.12	15.45
ZMAX	490660	39.87	47.60	15.55
ZMAX	490661	45.57	50.45	15.18
ZMAX	490670	45.37	49.21	15.73
ZMAX	490675	41.87	49.03	15.62
ZMAX	490680	47.11	50.23	16.72
ZMAX	490690	45.49	49.30	15.95
ZMAX	490700	53.74	59.45	29.95
ZMAX	490710	47.96	52.70	27.10
ZMAX	490711	52.00	54.53	16.28
ZMAX	490720	50.00	52.67	27.00
ZMAX	490730	50.23	53.77	26.23
ZMAX	490740	49.64	54.17	16.68
ZMAX	490742	58.00	59.70	28.00
ZMAX	490743	48.76	54.22	17.32
ZMAX	490744	49.87	54.22	17.32
ZMAX	490745	57.00	59.70	28.00
ZMAX	490746	57.00	60.23	26.48
ZMAX	490750	51.30	54.18	17.95
ZMAX	490751	55.00	56.59	25.63
ZMAX	490760	50.95	54.43	24.75
ZMAX	490770	51.91	55.55	26.07
ZMAX	490771	55.00	56.66	25.73
ZMAX	490772	56.00	57.91	26.25
ZMAX	490773	56.00	59.07	25.82
ZMAX	490776	56.00	57.62	25.05
ZMAX	490779	55.00	57.37	16.63

ALTERNATIVE 7 25-YEAR 24-HOUR

ZMAX	490780	54.21	57.67	22.25
ZMAX	490790	53.17	55.58	28.32
ZMAX	490791	56.00	58.61	27.17
ZMAX	490792	56.00	58.35	25.97
ZMAX	490794	56.00	57.67	29.38
ZMAX	490795	56.00	57.44	27.33
ZMAX	490800	53.17	55.96	14.97
ZMAX	490801	55.00	57.44	16.42
ZMAX	490802	56.00	58.00	25.58
ZMAX	490803	57.00	58.52	27.98
ZMAX	490804	56.00	58.52	27.70
ZMAX	490900	53.67	55.58	28.42
ZMAX	491010	22.06	25.52	14.12
ZMAX	491019	26.44	27.85	18.53
ZMAX	491020	26.14	29.05	16.60
ZMAX	491021	26.00	29.05	17.78
ZMAX	491022	27.07	29.04	17.30
ZMAX	491040	23.16	25.71	14.08
ZMAX	491041	26.86	29.46	13.87
ZMAX	491042	27.66	28.87	16.80
ZMAX	491043	27.17	28.78	16.83
ZMAX	491044	27.66	29.37	13.92
ZMAX	491060	25.96	29.82	63.60
ZMAX	491080	25.66	30.05	63.60
ZMAX	491100	28.96	31.12	62.93
ZMAX	491102	29.00	31.46	13.23
ZMAX	491120	27.86	31.87	84.13
ZMAX	491121	29.25	32.32	29.87
ZMAX	491122	32.00	33.38	13.42
ZMAX	491123	32.00	33.78	17.00
ZMAX	491140	29.62	32.47	29.55
ZMAX	491160	30.66	33.39	16.55
ZMAX	491180	32.00	35.42	26.15
ZMAX	491200	34.46	37.36	15.20
ZMAX	491220	36.97	38.44	19.33
ZMAX	491221	33.05	36.58	15.85
ZMAX	491222	36.80	38.95	13.12
ZMAX	491223	34.39	36.59	15.83
ZMAX	491240	31.00	33.19	27.75
ZMAX	491260	29.00	31.91	41.52
ZMAX	491280	29.00	32.00	38.45
ZMAX	491285	30.77	39.04	14.15
ZMAX	491300	29.00	31.92	41.52
ZMAX	491302	33.00	36.56	16.10
ZMAX	491320	32.90	36.55	15.93
ZMAX	491340	29.17	32.95	42.82
ZMAX	491344	36.00	38.48	27.60
ZMAX	491342	31.36	34.15	14.47
ZMAX	491360	33.97	36.88	16.73
ZMAX	491380	31.36	35.65	16.87
ZMAX	491382	33.00	33.59	14.38
ZMAX	491384	30.00	32.34	19.10
ZMAX	491387	34.17	39.59	25.33
ZMAX	491388	34.17	41.26	23.77
ZMAX	491390	36.63	39.63	15.52
ZMAX	491391	35.17	39.68	25.27
ZMAX	491393	42.00	45.45	23.05
ZMAX	491394	36.67	40.94	15.98
ZMAX	491395	35.27	39.68	25.25
ZMAX	491396	38.00	41.23	25.05
ZMAX	491397	32.07	39.50	25.43
ZMAX	491398	42.00	44.13	19.02
ZMAX	491399	38.00	41.28	23.77
ZMAX	491400	33.27	38.16	25.80
ZMAX	491401	36.77	42.43	14.37
ZMAX	491402	32.17	39.56	25.02
ZMAX	491404	38.96	41.29	23.82

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ZMAX	491406	36.77	40.95	15.97
ZMAX	491407	32.17	39.52	25.22
ZMAX	491392	43.00	47.53	19.02
ZMAX	491403	45.00	48.19	18.73
ZMAX	491440	38.17	39.98	20.50
ZMAX	491441	38.54	39.98	20.45
ZMAX	491460	30.71	36.68	14.35
ZMAX	491465	31.27	36.50	25.53
ZMAX	491480	33.87	36.84	13.53
ZMAX	491500	30.00	36.55	27.15
ZMAX	491501	31.17	36.54	27.22
ZMAX	491502	36.00	38.05	24.28
ZMAX	491520	38.15	41.52	13.77
ZMAX	491540	41.00	44.22	16.58
ZMAX	491541	42.00	46.58	27.38
ZMAX	491452	42.00	44.02	19.80
ZMAX	491453	37.18	40.18	13.47
ZMAX	491560	41.00	41.97	29.05
ZMAX	491561	38.00	42.12	29.67
ZMAX	491562	44.00	45.31	30.95
ZMAX	491563	39.00	42.12	29.67
ZMAX	491580	36.55	38.25	240.00
ZMAX	491600	39.73	42.59	159.15
ZMAX	491620	45.57	47.10	27.02
ZMAX	491621	48.00	50.63	27.65
ZMAX	490232	44.00	46.68	15.08
ZMAX	490431	41.00	44.60	26.55
ZMAX	490449	41.00	43.73	16.33
ZMAX	490457	39.00	40.79	18.67
ZMAX	490491	47.00	50.31	219.30
ZMAX	490492	47.00	51.03	17.72
ZMAX	490501	46.00	49.01	13.98
ZMAX	490511	48.00	50.60	28.05
ZMAX	490561	57.00	58.80	27.85
ZMAX	490581	44.00	46.11	14.50
ZMAX	490582	50.00	52.16	14.25
ZMAX	490584	50.00	52.32	25.10
ZMAX	490587	53.00	57.25	14.03
ZMAX	490701	54.00	58.71	15.35
ZMAX	490702	57.00	60.53	15.67
ZMAX	490703	53.74	55.40	14.15
ZMAX	490704	56.00	60.69	13.47
ZMAX	490713	52.00	54.37	19.92
ZMAX	490741	58.00	59.18	28.28
ZMAX	490762	56.00	59.03	25.53
ZMAX	490781	58.00	62.09	17.28
ZMAX	491274	31.22	39.06	14.17
ZMAX	491284	33.92	36.96	14.38
ZMAX	491389	39.00	40.60	20.42
ZMAX	491700	23.00	27.53	20.18
ZMAX	491701	9.70	25.35	29.83
ZMAX	491702	55.00	57.51	32.57
ZMAX	491703	25.00	27.50	15.93
ZMAX	491704	56.00	58.78	15.47
ZMAX	491705	55.80	57.51	32.57
ZMAX	491706	48.90	51.94	27.80
ZMAX	491707	45.00	46.96	30.25
ZMAX	491708	36.00	38.59	24.65
ZMAX	491709	37.00	39.24	15.80
ZMAX	491710	27.00	28.89	15.88
ZMAX	491711	24.00	26.41	25.53
ZMAX	491712	30.33	34.47	29.73
ZMAX	491713	30.00	34.07	61.77
ZMAX	491714	31.00	32.38	17.52
ZMAX	491715	40.17	42.50	36.28
ZMAX	491716	30.00	34.88	25.02
ZMAX	491717	52.00	55.24	16.38

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ZMAX	491718	34.00	36.55	14.83
ZMAX	491719	42.00	46.66	28.32
ZMAX	491720	38.00	40.61	15.87
ZMAX	491721	38.00	40.53	25.87
ZMAX	491722	39.00	39.92	17.15
ZMAX	491723	29.00	37.81	56.38
ZMAX	491724	29.00	34.88	24.98
ZMAX	491725	33.00	34.40	16.27
ZMAX	491728	30.00	35.21	15.82
ZMAX	491729	27.00	31.35	24.37
ZMAX	491730	26.00	29.87	18.22
ZMAX	491737	38.00	38.64	15.87
ZMAX	491740	37.00	38.62	15.67
ZMAX	491745	37.00	39.14	17.67
ZMAX	491746	37.00	39.08	26.35
ZMAX	491750	44.00	46.32	27.67
ZMAX	491753	49.00	51.45	21.95
ZMAX	490574	41.77	46.00	16.02
ZMAX	491405	42.00	44.60	17.08
ZMAX	490714	52.00	54.56	16.50
ZMAX	490753	51.00	54.46	29.98
ZMAX	491224	39.00	42.78	28.87
ZMAX	491225	41.50	43.96	14.92
ZMAX	491759	39.00	40.68	22.40
ZMAX	491760	39.00	40.61	22.92
ZMAX	491764	38.00	40.38	24.43
ZMAX	491768	38.00	40.29	24.43
ZMAX	499999	35.85	40.24	24.43
ZMAX	499998	35.80	40.22	24.45
ZMAX	499997	35.00	36.00	24.47
ZMAX	491002	30.84	34.07	62.45
ZMAX	491001	28.00	34.07	62.00
ZMAX	100000	99.00	99.00	0.00
ZMAX	100001	99.00	99.00	0.00
ZMAX	100002	99.00	99.00	0.00
ZMAX	100003	99.00	99.00	0.00
ZMAX	100004	99.00	99.00	0.00
ZMAX	100005	99.00	99.00	0.00
ZMAX	100006	99.00	99.00	0.00
ZMAX	100007	99.00	99.00	0.00
ZMAX	100008	99.00	99.00	0.00
ZMAX	100009	99.00	99.00	0.00
ZMAX	100010	99.00	99.00	0.00
ZMAX	100011	99.00	99.00	0.00
ZMAX	100012	99.00	99.00	0.00
ZMAX	100013	99.00	99.00	0.00
ZMAX	100014	99.00	99.00	0.00
ZMAX	100015	99.00	99.00	0.00
ZMAX	100016	99.00	99.00	0.00
ZMAX	100017	99.00	99.00	0.00
ZMAX	100018	99.00	99.00	0.00
ZMAX	100019	99.00	99.00	0.00
ZMAX	100020	99.00	99.00	0.00
ZMAX	100021	99.00	99.00	0.00
ZMAX	100022	99.00	99.00	0.00
ZMAX	100023	99.00	99.00	0.00
ZMAX	100024	99.00	99.00	0.00
ZMAX	100025	99.00	99.00	0.00
ZMAX	100026	99.00	99.00	0.00
ZMAX	100027	99.00	99.00	0.00
ZMAX	100028	99.00	99.00	0.00
ZMAX	100029	99.00	99.00	0.00
ZMAX	100030	99.00	99.00	0.00
ZMAX	100031	99.00	99.00	0.00
ZMAX	100032	99.00	99.00	0.00
ZMAX	100033	99.00	99.00	0.00
ZMAX	100034	99.00	99.00	0.00

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ZMAX	100035	99.00	99.00	0.00
ZMAX	100036	99.00	99.00	0.00
ZMAX	100037	99.00	99.00	0.00
ZMAX	100038	99.00	99.00	0.00
ZMAX	100039	99.00	99.00	0.00
ZMAX	100040	99.00	99.00	0.00
ZMAX	493010	17.00	23.49	25.48
ZMAX	493020	20.00	23.04	18.10
ZMAX	493030	18.00	24.47	13.05
ZMAX	493040	17.00	22.33	17.12
ZMAX	493060	21.00	21.50	13.27
ZMAX	493070	19.00	26.94	13.57
ZMAX	493090	18.00	23.45	25.08
ZMAX	493100	20.00	21.15	12.67
ZMAX	493110	18.00	20.02	12.90
ZMAX	493120	18.00	19.99	0.00
ZMAX	493130	17.00	20.16	12.70
ZMAX	493140	16.00	18.79	13.38
ZMAX	493150	16.00	19.40	13.03
ZMAX	493180	18.00	24.21	14.08
ZMAX	493185	19.00	24.19	14.08
ZMAX	493190	17.00	19.35	12.98
ZMAX	493195	17.00	20.16	13.05
ZMAX	493200	18.00	19.95	49.60
ZMAX	493210	18.00	19.27	12.98
ZMAX	493215	19.00	21.01	20.03
ZMAX	493220	16.00	19.14	13.10
ZMAX	493230	15.50	18.79	13.38
ZMAX	493240	16.00	19.33	27.43
ZMAX	493250	17.00	24.21	14.08
ZMAX	493260	21.00	24.19	13.65
ZMAX	493270	19.00	24.18	13.65
ZMAX	493280	19.00	23.09	13.00
ZMAX	493290	19.00	22.29	13.02
ZMAX	493310	17.00	23.77	49.00
ZMAX	493320	17.00	19.95	49.58
ZMAX	493330	17.00	19.87	13.47
ZMAX	493340	16.33	19.90	49.62
ZMAX	493350	15.50	17.76	13.03
ZMAX	493360	13.00	18.00	0.00
ZMAX	493370	14.61	18.28	13.85
ZMAX	493380	14.50	17.52	14.83
ZMAX	493390	14.50	18.09	13.43
ZMAX	493400	13.50	17.53	14.80
ZMAX	493410	12.50	17.52	14.82
ZMAX	493420	13.50	16.29	0.03
ZMAX	493430	12.44	15.97	0.08
ZMAX	493440	15.50	19.33	27.43
ZMAX	493450	18.00	19.05	14.57
ZMAX	493470	16.00	19.05	14.58
ZMAX	493480	15.50	19.07	14.57
ZMAX	493500	12.27	17.00	14.35
ZMAX	493505	12.27	16.90	16.73
ZMAX	493520	11.76	14.97	15.90
ZMAX	493525	11.00	14.88	15.78
ZMAX	493530	14.50	17.29	13.67
ZMAX	493535	15.00	17.29	13.67
ZMAX	493540	13.50	15.99	0.00
ZMAX	493545	9.65	14.82	15.72
ZMAX	493550	14.50	15.24	12.67
ZMAX	493555	13.50	14.88	13.63
ZMAX	494010	24.80	26.00	0.00
ZMAX	494020	22.90	25.59	12.67
ZMAX	494025	20.00	21.25	12.73
ZMAX	494030	22.00	22.74	13.00
ZMAX	494040	19.00	20.56	13.03
ZMAX	494045	18.70	20.56	13.03

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ZMAX	494050	20.00	25.00	0.00
ZMAX	494060	25.00	26.00	0.00
ZMAX	494070	18.00	19.88	13.68
ZMAX	494072	19.00	22.07	13.53
ZMAX	494074	20.00	21.08	12.73
ZMAX	494076	19.00	21.08	12.72
ZMAX	494078	21.00	22.18	12.73
ZMAX	494080	18.00	20.17	12.83
ZMAX	494100	17.00	19.08	15.12
ZMAX	494110	15.29	17.66	14.93
ZMAX	494120	18.00	19.32	13.43
ZMAX	494130	17.00	18.47	14.57
ZMAX	494140	14.50	18.46	14.60
ZMAX	494150	15.00	17.66	14.92
ZMAX	494170	18.00	19.89	13.65
ZMAX	494180	17.00	19.64	14.57
ZMAX	494185	17.00	19.77	13.73
ZMAX	494190	17.00	18.71	13.80
ZMAX	494200	15.00	16.97	0.03
ZMAX	494205	17.00	19.05	12.60
ZMAX	494210	14.87	18.80	0.00
ZMAX	494220	15.75	18.22	0.02
ZMAX	494230	16.00	18.12	14.12
ZMAX	494240	15.71	18.39	13.38
ZMAX	494250	16.70	17.98	0.00
ZMAX	495010	20.00	23.23	12.52
ZMAX	495020	15.50	19.33	27.43
ZMAX	495030	15.50	19.33	27.43
ZMAX	495035	19.00	21.09	24.97
ZMAX	495038	17.00	18.17	12.78
ZMAX	495040	16.00	18.70	12.88
ZMAX	495045	15.00	15.88	12.68
ZMAX	495050	15.50	18.89	24.92
ZMAX	495055	15.50	16.83	12.57
ZMAX	495060	14.80	15.87	12.70
ZMAX	495065	14.50	16.26	12.57
ZMAX	495070	11.50	13.90	17.63
ZMAX	495075	11.50	13.43	22.40
ZMAX	495080	13.18	13.99	0.00
ZMAX	495085	13.00	15.04	17.12
ZMAX	495090	11.42	13.47	21.82
ZMAX	495100	15.00	18.47	14.75
ZMAX	495110	14.50	17.09	12.50
ZMAX	495120	13.00	14.23	12.92
ZMAX	495125	14.42	16.27	14.58
ZMAX	495140	14.50	16.81	26.47
ZMAX	495145	14.50	16.81	26.47
ZMAX	495150	13.00	14.24	12.92
ZMAX	495152	12.50	16.09	25.52
ZMAX	495154	12.50	16.02	19.38
ZMAX	495155	12.50	16.02	19.38
ZMAX	495156	12.50	13.49	0.00
ZMAX	495160	1.50	9.70	22.55
ZMAX	495162	13.50	15.57	25.52
ZMAX	495165	13.50	16.01	17.57
ZMAX	495170	8.00	12.64	23.45
ZMAX	495180	10.45	12.41	0.00
ZMAX	495210	12.50	14.68	25.08
ZMAX	495215	12.50	14.23	12.93
ZMAX	495230	8.82	12.33	13.10
ZMAX	495235	10.50	13.88	24.82
ZMAX	495240	8.50	10.66	13.77
ZMAX	495260	13.00	16.05	24.57
ZMAX	495270	12.50	14.22	12.93
ZMAX	495275	11.50	13.22	12.92
ZMAX	495280	10.90	11.27	12.97
ZMAX	495300	13.94	15.71	13.67

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ZMAX	495302	13.90	15.67	13.55
ZMAX	495304	13.31	15.60	13.22
ZMAX	495306	12.73	14.39	13.88
ZMAX	495308	12.18	14.27	14.23
ZMAX	495310	11.49	13.46	21.95
ZMAX	495312	10.92	13.46	22.07
ZMAX	495314	10.43	13.45	22.27
ZMAX	495316	11.80	14.15	12.53
ZMAX	495320	9.75	13.45	22.25
ZMAX	495322	9.64	14.74	15.77
ZMAX	495324	9.44	14.48	16.03
ZMAX	495326	9.30	14.03	17.13
ZMAX	495328	9.43	13.90	17.63
ZMAX	495330	9.20	13.90	17.63
ZMAX	495332	9.02	13.90	17.60
ZMAX	495334	8.90	13.63	19.22
ZMAX	495336	8.72	13.44	22.30
ZMAX	495338	8.53	13.43	22.40
ZMAX	495340	8.40	13.42	22.38
ZMAX	495342	8.23	13.41	22.42
ZMAX	495344	8.04	12.52	23.65
ZMAX	495346	7.85	12.22	24.17
ZMAX	495348	7.66	12.01	24.37
ZMAX	495350	7.47	10.86	13.58
ZMAX	495352	7.34	10.68	13.75
ZMAX	495354	7.26	10.70	13.60
ZMAX	495356	7.19	10.63	13.80
ZMAX	496010	14.50	16.27	14.60
ZMAX	496020	14.50	18.79	0.00
ZMAX	496030	14.50	16.32	0.02
ZMAX	496060	16.60	16.77	12.83
ZMAX	496065	14.00	16.28	0.10
ZMAX	496070	14.00	16.25	0.10
ZMAX	496080	14.20	17.99	0.00
ZMAX	496090	14.00	17.99	0.00
ZMAX	496100	12.50	15.91	0.07
ZMAX	496110	11.00	15.73	14.87
ZMAX	496120	13.00	15.31	13.30
ZMAX	496125	12.00	15.18	20.45
ZMAX	496130	13.00	15.61	14.93
ZMAX	496150	14.00	15.69	14.90
ZMAX	496160	11.00	15.18	20.45
ZMAX	496170	12.00	15.72	14.88
ZMAX	496175	12.00	14.94	14.92
ZMAX	496180	11.00	13.28	13.00
ZMAX	496190	11.00	13.27	13.00
ZMAX	496200	10.50	11.93	15.67
ZMAX	496232	16.00	18.00	0.00
ZMAX	496234	14.00	16.36	0.15
ZMAX	496235	15.00	15.41	0.12
ZMAX	496240	14.28	15.85	0.03
ZMAX	496245	13.50	15.22	13.67
ZMAX	496260	13.50	15.17	13.67
ZMAX	496270	12.50	13.85	13.57
ZMAX	496280	9.50	12.33	13.90
ZMAX	496310	10.50	11.92	15.68
ZMAX	496320	10.50	11.90	15.72
ZMAX	496340	4.43	11.88	15.70
ZMAX	496350	8.50	10.59	25.02
ZMAX	496360	7.50	9.08	13.68
ZMAX	496370	6.50	8.66	17.52
ZMAX	496380	5.50	8.65	17.50
ZMAX	496390	4.41	8.73	17.37
ZMAX	496395	4.50	8.47	17.92
ZMAX	496400	6.50	8.65	17.48
ZMAX	496410	-0.65	8.47	17.92
ZMAX	496420	3.50	8.21	18.90

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ZMAX	496430	5.50	9.18	12.98
ZMAX	496440	5.50	8.26	19.20
ZMAX	496450	3.50	8.26	19.20
ZMAX	496460	5.50	10.10	14.18
ZMAX	496470	3.00	8.26	19.18
ZMAX	496480	6.50	10.06	15.08
ZMAX	496485	7.50	11.00	16.52
ZMAX	496490	3.50	9.02	20.33
ZMAX	496500	6.50	11.00	0.00
ZMAX	496510	4.50	8.50	240.00
ZMAX	496515	4.50	8.26	19.20
ZMAX	496520	5.50	8.26	19.20
ZMAX	496530	5.50	8.26	19.22
ZMAX	496540	6.50	8.26	19.20
ZMAX	496545	4.00	8.26	19.20
ZMAX	496550	4.00	8.26	19.18
ZMAX	496560	3.00	8.26	19.18
ZMAX	496570	5.50	8.24	19.18
ZMAX	496580	7.50	11.01	13.97
ZMAX	496590	4.50	8.47	17.92
ZMAX	496600	-1.88	8.26	19.10
ZMAX	496610	4.50	8.18	19.05
ZMAX	496620	4.50	8.16	19.03
ZMAX	497010	11.00	13.93	13.30
ZMAX	497020	3.50	10.44	14.45
ZMAX	497025	8.50	11.15	12.73
ZMAX	497035	6.50	10.48	13.15
ZMAX	497045	4.50	8.01	13.30
ZMAX	497050	3.50	8.00	13.30
ZMAX	497055	3.50	6.88	21.00
ZMAX	497065	1.88	6.88	21.00
ZMAX	497070	8.50	10.07	12.88
ZMAX	497080	2.06	7.13	19.50
ZMAX	497085	6.50	10.25	14.60
ZMAX	497086	6.32	10.62	13.82
ZMAX	497088	5.89	10.43	14.45
ZMAX	497090	4.32	10.30	14.58
ZMAX	497092	3.75	9.88	14.72
ZMAX	497094	2.75	9.43	14.77
ZMAX	497096	2.30	8.71	14.85
ZMAX	497098	1.85	8.49	14.88
ZMAX	497100	-0.16	7.41	19.53
ZMAX	497102	-1.57	7.31	19.52
ZMAX	497104	-2.19	7.27	19.52
ZMAX	497105	-1.00	7.26	19.52
ZMAX	497106	-1.37	7.11	19.45
ZMAX	497107	-2.07	7.11	19.45
ZMAX	497108	-0.37	7.09	19.45
ZMAX	497109	-4.75	7.11	19.45
ZMAX	497111	-3.66	7.10	19.45
ZMAX	497112	-3.66	7.01	19.45
ZMAX	497113	-5.33	6.91	19.45
ZMAX	497110	-0.19	8.28	18.78
ZMAX	497120	1.50	7.11	19.47
ZMAX	497122	4.50	7.11	19.47
ZMAX	497124	4.00	7.11	19.47
ZMAX	497130	-0.21	8.14	18.08
ZMAX	497140	4.00	7.13	19.50
ZMAX	497150	5.40	7.11	19.45
ZMAX	497160	-1.85	8.15	18.98
ZMAX	497161	-2.25	7.89	19.12
ZMAX	497162	-2.86	7.36	19.37
ZMAX	497170	-6.19	4.18	19.50
ZMAX	500010	6.94	11.25	12.75
ZMAX	500020	8.41	10.31	14.30
ZMAX	500025	6.13	11.05	12.97
ZMAX	500030	5.77	11.04	12.97

ALTERNATIVE 7 25-YEAR 24-HOUR

ZMAX	500040	5.07	10.55	13.05
ZMAX	500050	4.00	8.91	13.03
ZMAX	500110	7.43	11.26	12.82
ZMAX	500120	6.16	10.25	15.02
ZMAX	500130	8.00	11.90	13.60
ZMAX	500140	6.39	10.32	17.22
ZMAX	500210	4.00	10.40	13.80
ZMAX	500220	6.91	11.27	12.73
ZMAX	500300	5.00	10.08	12.68
ZMAX	9498000	-6.69	2.96	0.00
ZMAX	9496630	12.00	12.00	0.00
ZMAX	9493020	20.00	20.00	0.00
ZMAX	9493060	22.50	22.50	0.00
ZMAX	9493190	19.00	19.00	0.00
ZMAX	9493140	19.98	19.98	0.00
ZMAX	9493150	19.70	19.70	0.00
ZMAX	9493240	19.00	19.00	0.00
ZMAX	9495030	17.48	17.48	0.00
ZMAX	9495010	23.20	23.20	0.00
ZMAX	9495085	15.10	15.10	0.00
ZMAX	9495140	16.00	16.00	0.00
ZMAX	9495145	16.00	16.00	0.00
ZMAX	9496320	11.00	11.00	0.00
ZMAX	9496260	14.00	14.00	0.00
ZMAX	9494250	18.00	18.00	0.00
ZMAX	9494190	18.50	18.50	0.00
ZMAX	600000	1.00	7.23	22.82
ZMAX	600010	0.50	4.62	22.82
ZMAX	600020	0.00	2.81	22.82
ZMAX	600030	7.50	13.22	22.67
ZMAX	600040	2.00	12.68	22.98
ZMAX	600050	8.04	12.45	23.65
ZMAX	100043	99.00	99.00	0.00
ZMAX	100044	99.00	99.00	0.00
ZMAX	100045	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100047	99.00	99.00	0.00
ZMAX	100048	99.00	99.00	0.00
ZMAX	100049	99.00	99.00	0.00
ZMAX	100050	99.00	99.00	0.00
ZMAX	100051	99.00	99.00	0.00
ZMAX	100052	99.00	99.00	0.00
ZMAX	100053	99.00	99.00	0.00
ZMAX	100054	99.00	99.00	0.00
ZMAX	100055	99.00	99.00	0.00
ZMAX	100056	99.00	99.00	0.00
ZMAX	100057	99.00	99.00	0.00
ZMAX	100058	99.00	99.00	0.00
ZMAX	100059	99.00	99.00	0.00
ZMAX	100060	99.00	99.00	0.00
ZMAX	100061	99.00	99.00	0.00
ZMAX	100062	99.00	99.00	0.00
ZMAX	100063	99.00	99.00	0.00
ZMAX	100064	99.00	99.00	0.00
ZMAX	100065	99.00	99.00	0.00
ZMAX	100066	99.00	99.00	0.00
ZMAX	100067	99.00	99.00	0.00
ZMAX	100068	99.00	99.00	0.00
ZMAX	100069	99.00	99.00	0.00
ZMAX	100070	99.00	99.00	0.00
ZMAX	100071	99.00	99.00	0.00
ZMAX	100072	99.00	99.00	0.00
ZMAX	100073	99.00	99.00	0.00
ZMAX	100074	99.00	99.00	0.00
ZMAX	100075	99.00	99.00	0.00
ZMAX	100076	99.00	99.00	0.00

ALTERNATIVE 7 25-YEAR 24-HOUR

ZMAX	100077	99.00	99.00	0.00
ZMAX	100078	99.00	99.00	0.00
ZMAX	100079	99.00	99.00	0.00
ZMAX	100080	99.00	99.00	0.00
ZMAX	100081	99.00	99.00	0.00
ZMAX	100082	99.00	99.00	0.00
ZMAX	100083	99.00	99.00	0.00
ZMAX	100084	99.00	99.00	0.00
ZMAX	100085	99.00	99.00	0.00
ZMAX	100086	99.00	99.00	0.00
ZMAX	100087	99.00	99.00	0.00
ZMAX	100088	99.00	99.00	0.00
ZMAX	100089	99.00	99.00	0.00

Alternative 8 Channel Improvement TBE

ALTERNATIVE 8 5-YEAR 24-HOUR

	JUNC ID	INVT	Z_MAX	T_MAX
ZMAX	490000	24.23	26.46	0.00
ZMAX	490004	26.46	27.84	25.85
ZMAX	490002	20.93	26.14	29.05
ZMAX	490008	27.00	28.09	29.87
ZMAX	490010	26.16	28.19	39.67
ZMAX	490020	24.36	28.20	26.73
ZMAX	490030	26.46	28.14	25.25
ZMAX	490040	29.00	29.90	26.57
ZMAX	490050	25.16	28.39	15.43
ZMAX	490070	25.96	29.13	26.62
ZMAX	490071	29.00	29.91	14.60
ZMAX	490072	27.00	28.02	27.30
ZMAX	490073	30.00	32.31	14.45
ZMAX	490080	27.66	29.13	27.27
ZMAX	490090	28.00	30.71	27.40
ZMAX	490100	29.00	29.69	14.10
ZMAX	490110	26.16	29.70	25.18
ZMAX	490120	30.64	33.01	69.37
ZMAX	490130	28.96	33.02	69.32
ZMAX	490140	29.26	31.53	240.00
ZMAX	490141	31.00	32.13	26.37
ZMAX	490150	29.89	33.27	67.15
ZMAX	490160	29.77	34.52	59.60
ZMAX	490170	35.00	38.56	26.23
ZMAX	490180	32.66	37.49	26.72
ZMAX	490181	33.75	37.49	26.82
ZMAX	490200	36.66	38.56	26.23
ZMAX	490210	36.29	38.35	0.00
ZMAX	490211	39.00	40.60	17.20
ZMAX	490220	40.04	42.02	15.35
ZMAX	490221	42.00	44.50	30.53
ZMAX	490230	39.95	40.97	25.65
ZMAX	490240	26.36	30.28	24.42
ZMAX	490250	29.00	32.36	21.48
ZMAX	490251	33.00	34.78	29.83
ZMAX	490260	31.16	33.28	16.17
ZMAX	490261	34.00	36.08	13.83
ZMAX	490263	34.00	35.25	28.05
ZMAX	490264	33.00	34.83	24.37
ZMAX	490266	34.00	35.80	16.42
ZMAX	490270	35.00	37.74	14.40
ZMAX	490280	32.70	34.78	29.83
ZMAX	490281	32.70	34.78	29.75
ZMAX	490290	31.00	34.39	16.30
ZMAX	490300	31.86	33.17	13.50
ZMAX	490310	33.00	36.26	18.32
ZMAX	490320	34.00	37.76	20.60
ZMAX	490321	36.00	38.24	37.90
ZMAX	490330	37.00	38.66	27.77
ZMAX	490340	35.00	37.83	14.20
ZMAX	490350	36.00	38.67	25.85
ZMAX	490370	33.96	35.92	25.73
ZMAX	490375	35.00	38.08	57.15
ZMAX	490390	34.56	37.97	24.93
ZMAX	490391	36.80	37.26	26.05
ZMAX	490392	36.40	36.82	15.00
ZMAX	490400	37.00	38.89	25.85
ZMAX	490401	37.00	39.37	25.98
ZMAX	490410	35.46	38.08	57.08
ZMAX	490411	36.00	38.08	57.08
ZMAX	490420	35.00	40.20	50.95
ZMAX	490421	39.00	39.74	28.53
ZMAX	490422	39.00	41.05	25.17
ZMAX	490425	38.00	40.20	51.63
ZMAX	490430	35.47	40.69	26.00
ZMAX	490440	40.00	42.84	26.75

ALTERNATIVE 8 5-YEAR 24-HOUR

ZMAX	490450	39.00	40.58	57.92
ZMAX	490451	39.00	40.14	29.65
ZMAX	490453	39.00	40.14	31.75
ZMAX	490455	39.00	40.60	21.83
ZMAX	490460	43.00	45.73	27.53
ZMAX	490470	40.00	41.74	25.50
ZMAX	490480	39.67	42.00	0.00
ZMAX	490490	40.38	42.30	19.83
ZMAX	490500	41.00	44.61	59.72
ZMAX	490510	49.00	50.73	17.83
ZMAX	490520	43.47	48.11	27.60
ZMAX	490530	51.00	54.16	83.12
ZMAX	490535	56.47	57.94	16.12
ZMAX	490540	56.00	58.17	16.05
ZMAX	490550	48.00	49.28	17.52
ZMAX	490555	48.07	51.02	13.92
ZMAX	490560	49.00	49.74	16.27
ZMAX	490580	35.47	40.81	25.98
ZMAX	490590	48.37	49.31	26.27
ZMAX	490600	42.54	44.45	25.78
ZMAX	490610	39.77	41.38	27.08
ZMAX	490612	42.00	44.20	27.75
ZMAX	490620	41.70	42.88	16.80
ZMAX	490621	44.00	45.18	27.30
ZMAX	490630	42.17	44.53	20.53
ZMAX	490637	41.53	42.43	14.78
ZMAX	490638	44.12	44.50	24.82
ZMAX	490639	48.72	49.21	14.53
ZMAX	490640	37.57	40.86	25.33
ZMAX	490641	44.00	46.73	24.48
ZMAX	490642	45.16	47.24	16.32
ZMAX	490643	39.87	44.93	16.70
ZMAX	490644	47.67	49.21	14.60
ZMAX	490645	48.67	51.27	24.60
ZMAX	490646	41.53	47.31	14.48
ZMAX	490650	43.27	45.09	19.27
ZMAX	490651	48.16	50.18	16.65
ZMAX	490652	43.47	46.22	13.98
ZMAX	490654	46.00	48.13	26.82
ZMAX	490655	46.55	48.83	14.98
ZMAX	490659	45.57	48.11	14.32
ZMAX	490660	39.87	46.11	14.37
ZMAX	490661	45.57	49.72	16.63
ZMAX	490670	45.37	48.30	14.27
ZMAX	490675	41.87	48.11	14.30
ZMAX	490680	47.11	49.55	16.67
ZMAX	490690	45.49	48.39	14.18
ZMAX	490700	53.74	58.68	29.58
ZMAX	490710	47.96	52.09	27.78
ZMAX	490711	52.00	54.43	21.28
ZMAX	490720	50.00	52.14	27.97
ZMAX	490730	50.23	52.56	25.45
ZMAX	490740	49.64	53.25	17.57
ZMAX	490742	58.00	59.32	14.05
ZMAX	490743	48.76	53.27	18.00
ZMAX	490744	49.87	53.27	18.00
ZMAX	490745	57.00	59.15	29.72
ZMAX	490746	57.00	59.23	26.50
ZMAX	490750	51.30	53.51	16.03
ZMAX	490751	55.00	56.23	25.60
ZMAX	490760	50.95	53.93	20.07
ZMAX	490770	51.91	55.20	27.10
ZMAX	490771	55.00	56.06	25.68
ZMAX	490772	56.00	57.26	26.22
ZMAX	490773	56.00	58.54	25.82
ZMAX	490776	56.00	57.12	27.18
ZMAX	490779	55.00	57.10	24.95

ALTERNATIVE 8 5-YEAR 24-HOUR

ZMAX	490780	54.21	57.06	20.42
ZMAX	490790	53.17	55.16	41.82
ZMAX	490791	56.00	57.79	27.22
ZMAX	490792	56.00	57.63	26.03
ZMAX	490794	56.00	57.24	29.38
ZMAX	490795	56.00	56.98	27.40
ZMAX	490800	53.17	55.62	14.60
ZMAX	490801	55.00	57.11	25.08
ZMAX	490802	56.00	57.35	25.72
ZMAX	490803	57.00	57.89	28.22
ZMAX	490804	56.00	57.89	27.72
ZMAX	490900	53.67	55.16	41.88
ZMAX	491010	22.06	24.94	14.25
ZMAX	491019	26.44	27.43	17.70
ZMAX	491020	26.14	28.53	16.78
ZMAX	491021	26.00	28.54	17.08
ZMAX	491022	27.07	28.53	16.93
ZMAX	491040	23.16	25.04	14.20
ZMAX	491041	26.86	29.01	13.92
ZMAX	491042	27.66	28.61	16.12
ZMAX	491043	27.17	28.39	16.33
ZMAX	491044	27.66	28.94	13.97
ZMAX	491060	25.96	28.98	116.38
ZMAX	491080	25.66	29.01	116.38
ZMAX	491100	28.96	30.31	96.63
ZMAX	491102	29.00	31.08	13.28
ZMAX	491120	27.86	30.30	78.73
ZMAX	491121	29.25	32.22	42.45
ZMAX	491122	32.00	33.30	13.50
ZMAX	491123	32.00	33.51	17.65
ZMAX	491140	29.62	32.27	42.22
ZMAX	491160	30.66	32.57	17.13
ZMAX	491180	32.00	34.31	25.73
ZMAX	491200	34.46	36.56	14.65
ZMAX	491220	36.97	38.07	19.53
ZMAX	491221	33.05	36.27	14.00
ZMAX	491222	36.80	38.34	13.12
ZMAX	491223	34.39	36.28	13.98
ZMAX	491240	31.00	32.45	27.82
ZMAX	491260	29.00	31.14	86.48
ZMAX	491280	29.00	31.31	84.15
ZMAX	491285	30.77	38.29	14.47
ZMAX	491300	29.00	31.31	84.15
ZMAX	491302	33.00	36.22	18.52
ZMAX	491320	32.90	36.23	14.03
ZMAX	491340	29.17	31.70	35.60
ZMAX	491344	36.00	37.90	27.73
ZMAX	491342	31.36	34.00	14.92
ZMAX	491360	33.97	36.54	16.25
ZMAX	491380	31.36	35.21	17.23
ZMAX	491382	33.00	33.42	14.47
ZMAX	491384	30.00	32.09	26.75
ZMAX	491387	34.17	38.94	50.17
ZMAX	491388	34.17	40.79	26.65
ZMAX	491390	36.63	38.94	49.25
ZMAX	491391	35.17	38.97	49.27
ZMAX	491393	42.00	44.71	19.67
ZMAX	491394	36.67	40.02	17.42
ZMAX	491395	35.27	38.97	49.25
ZMAX	491396	38.00	40.30	27.32
ZMAX	491397	32.07	38.93	50.12
ZMAX	491398	42.00	44.02	41.60
ZMAX	491399	38.00	40.79	26.65
ZMAX	491400	33.27	35.12	13.50
ZMAX	491401	36.77	42.20	14.83
ZMAX	491402	32.17	38.94	49.27
ZMAX	491404	38.96	40.79	27.17

ALTERNATIVE 8 5-YEAR 24-HOUR

ZMAX	491406	36.77	40.02	17.37
ZMAX	491407	32.17	38.93	50.40
ZMAX	491392	43.00	47.25	27.48
ZMAX	491403	45.00	48.01	29.82
ZMAX	491440	38.17	39.66	27.67
ZMAX	491441	38.54	39.66	27.65
ZMAX	491460	30.71	35.80	24.70
ZMAX	491465	31.27	35.83	25.22
ZMAX	491480	33.87	36.50	13.55
ZMAX	491500	30.00	35.85	26.38
ZMAX	491501	31.17	35.84	26.03
ZMAX	491502	36.00	37.76	27.88
ZMAX	491520	38.15	40.01	13.38
ZMAX	491540	41.00	43.84	27.87
ZMAX	491541	42.00	45.46	27.55
ZMAX	491452	42.00	43.55	26.18
ZMAX	491453	37.18	39.41	13.48
ZMAX	491560	41.00	41.59	28.95
ZMAX	491561	38.00	41.35	29.92
ZMAX	491562	44.00	44.85	31.13
ZMAX	491563	39.00	41.35	29.92
ZMAX	491580	36.55	37.57	28.97
ZMAX	491600	39.73	41.37	240.00
ZMAX	491620	45.57	46.63	28.27
ZMAX	491621	48.00	50.20	27.60
ZMAX	490232	44.00	46.41	16.42
ZMAX	490431	41.00	44.07	26.53
ZMAX	490449	41.00	43.29	17.73
ZMAX	490457	39.00	40.61	22.20
ZMAX	490491	47.00	48.42	29.25
ZMAX	490492	47.00	50.25	29.27
ZMAX	490501	46.00	48.82	14.10
ZMAX	490511	48.00	49.65	28.08
ZMAX	490561	57.00	58.11	27.78
ZMAX	490581	44.00	45.94	15.03
ZMAX	490582	50.00	51.82	18.60
ZMAX	490584	50.00	51.51	26.03
ZMAX	490587	53.00	56.61	16.95
ZMAX	490701	54.00	58.55	20.10
ZMAX	490702	57.00	60.42	25.63
ZMAX	490703	53.74	55.00	14.12
ZMAX	490704	56.00	60.39	14.15
ZMAX	490713	52.00	53.82	29.12
ZMAX	490741	58.00	58.74	28.33
ZMAX	490762	56.00	58.18	27.28
ZMAX	490781	58.00	61.75	17.97
ZMAX	491274	31.22	38.40	14.72
ZMAX	491284	33.92	36.06	14.38
ZMAX	491389	39.00	40.35	27.20
ZMAX	491700	23.00	26.12	24.52
ZMAX	491701	9.70	24.05	37.10
ZMAX	491702	55.00	56.74	35.83
ZMAX	491703	25.00	27.31	18.43
ZMAX	491704	56.00	58.66	16.53
ZMAX	491705	55.80	56.74	35.83
ZMAX	491706	48.90	51.25	27.72
ZMAX	491707	45.00	46.40	30.12
ZMAX	491708	36.00	38.27	28.08
ZMAX	491709	37.00	39.09	16.23
ZMAX	491710	27.00	28.65	16.65
ZMAX	491711	24.00	25.42	40.30
ZMAX	491712	30.33	33.33	29.95
ZMAX	491713	30.00	33.34	30.13
ZMAX	491714	31.00	32.02	21.07
ZMAX	491715	40.17	41.74	25.38
ZMAX	491716	30.00	34.36	28.57
ZMAX	491717	52.00	55.10	26.70

ALTERNATIVE 8 5-YEAR 24-HOUR

ZMAX	491718	34.00	36.29	15.75
ZMAX	491719	42.00	45.70	28.52
ZMAX	491720	38.00	40.31	16.47
ZMAX	491721	38.00	39.98	25.93
ZMAX	491722	39.00	39.57	16.95
ZMAX	491723	29.00	37.08	39.95
ZMAX	491724	29.00	34.36	28.88
ZMAX	491725	33.00	33.95	16.62
ZMAX	491728	30.00	34.61	27.77
ZMAX	491729	27.00	30.19	27.33
ZMAX	491730	26.00	29.17	22.00
ZMAX	491737	38.00	38.53	16.62
ZMAX	491740	37.00	38.49	16.32
ZMAX	491745	37.00	38.92	21.35
ZMAX	491746	37.00	38.72	28.12
ZMAX	491750	44.00	45.43	27.72
ZMAX	491753	49.00	50.77	29.85
ZMAX	490574	41.77	45.22	15.65
ZMAX	491405	42.00	44.34	28.37
ZMAX	490714	52.00	54.09	17.12
ZMAX	490753	51.00	53.78	28.50
ZMAX	491224	39.00	41.41	28.83
ZMAX	491225	41.50	43.41	14.97
ZMAX	491759	39.00	40.31	21.92
ZMAX	491760	39.00	40.27	22.13
ZMAX	491764	38.00	40.00	20.45
ZMAX	491768	38.00	39.63	22.73
ZMAX	499999	35.85	39.59	22.75
ZMAX	499998	35.80	39.58	22.73
ZMAX	499997	35.00	35.80	22.73
ZMAX	491002	30.84	33.34	30.13
ZMAX	491001	28.00	33.34	30.07
ZMAX	100000	99.00	99.00	0.00
ZMAX	100001	99.00	99.00	0.00
ZMAX	100002	99.00	99.00	0.00
ZMAX	100003	99.00	99.00	0.00
ZMAX	100004	99.00	99.00	0.00
ZMAX	100005	99.00	99.00	0.00
ZMAX	100006	99.00	99.00	0.00
ZMAX	100007	99.00	99.00	0.00
ZMAX	100008	99.00	99.00	0.00
ZMAX	100009	99.00	99.00	0.00
ZMAX	100010	99.00	99.00	0.00
ZMAX	100011	99.00	99.00	0.00
ZMAX	100012	99.00	99.00	0.00
ZMAX	100013	99.00	99.00	0.00
ZMAX	100014	99.00	99.00	0.00
ZMAX	100015	99.00	99.00	0.00
ZMAX	100016	99.00	99.00	0.00
ZMAX	100017	99.00	99.00	0.00
ZMAX	100018	99.00	99.00	0.00
ZMAX	100019	99.00	99.00	0.00
ZMAX	100020	99.00	99.00	0.00
ZMAX	100021	99.00	99.00	0.00
ZMAX	100022	99.00	99.00	0.00
ZMAX	100023	99.00	99.00	0.00
ZMAX	100024	99.00	99.00	0.00
ZMAX	100025	99.00	99.00	0.00
ZMAX	100026	99.00	99.00	0.00
ZMAX	100027	99.00	99.00	0.00
ZMAX	100028	99.00	99.00	0.00
ZMAX	100029	99.00	99.00	0.00
ZMAX	100030	99.00	99.00	0.00
ZMAX	100031	99.00	99.00	0.00
ZMAX	100032	99.00	99.00	0.00
ZMAX	100033	99.00	99.00	0.00
ZMAX	100034	99.00	99.00	0.00

ALTERNATIVE 8 5-YEAR 24-HOUR

ZMAX	100035	99.00	99.00	0.00
ZMAX	100036	99.00	99.00	0.00
ZMAX	100037	99.00	99.00	0.00
ZMAX	100038	99.00	99.00	0.00
ZMAX	100039	99.00	99.00	0.00
ZMAX	100040	99.00	99.00	0.00
ZMAX	493010	17.00	22.66	25.45
ZMAX	493020	20.00	22.62	27.23
ZMAX	493030	18.00	24.41	13.30
ZMAX	493040	17.00	22.11	21.47
ZMAX	493060	21.00	21.45	13.35
ZMAX	493070	19.00	25.64	13.65
ZMAX	493090	18.00	22.29	25.08
ZMAX	493100	20.00	21.11	12.67
ZMAX	493110	18.00	19.93	12.95
ZMAX	493120	18.00	19.99	0.00
ZMAX	493130	17.00	20.08	13.00
ZMAX	493140	16.00	18.43	13.70
ZMAX	493150	16.00	19.33	13.83
ZMAX	493180	18.00	24.08	14.90
ZMAX	493185	19.00	23.23	18.43
ZMAX	493190	17.00	19.21	13.03
ZMAX	493195	17.00	20.06	13.65
ZMAX	493200	18.00	19.64	14.00
ZMAX	493210	18.00	19.18	13.03
ZMAX	493215	19.00	20.75	25.27
ZMAX	493220	16.00	18.96	13.32
ZMAX	493230	15.50	18.43	13.70
ZMAX	493240	16.00	19.06	14.82
ZMAX	493250	17.00	24.08	14.90
ZMAX	493260	21.00	24.08	14.97
ZMAX	493270	19.00	24.07	14.97
ZMAX	493280	19.00	23.06	13.03
ZMAX	493290	19.00	22.23	15.38
ZMAX	493310	17.00	21.71	29.07
ZMAX	493320	17.00	19.80	0.00
ZMAX	493330	17.00	19.63	14.03
ZMAX	493340	16.33	19.62	14.00
ZMAX	493350	15.50	17.69	13.17
ZMAX	493360	13.00	18.00	0.00
ZMAX	493370	14.61	17.75	13.97
ZMAX	493380	14.50	17.08	17.00
ZMAX	493390	14.50	17.86	13.77
ZMAX	493400	13.50	17.08	16.98
ZMAX	493410	12.50	17.08	16.98
ZMAX	493420	13.50	16.29	0.03
ZMAX	493430	12.44	15.97	0.08
ZMAX	493440	15.50	18.71	28.12
ZMAX	493450	18.00	18.84	14.95
ZMAX	493470	16.00	18.83	14.97
ZMAX	493480	15.50	18.84	14.95
ZMAX	493500	12.27	16.79	14.65
ZMAX	493505	12.27	16.26	17.22
ZMAX	493520	11.76	14.57	17.10
ZMAX	493525	11.00	14.46	16.90
ZMAX	493530	14.50	17.13	16.60
ZMAX	493535	15.00	17.13	16.60
ZMAX	493540	13.50	15.99	0.00
ZMAX	493545	9.65	14.41	16.95
ZMAX	493550	14.50	15.20	12.70
ZMAX	493555	13.50	14.81	12.50
ZMAX	494010	24.80	26.00	0.00
ZMAX	494020	22.90	25.55	12.93
ZMAX	494025	20.00	21.16	12.95
ZMAX	494030	22.00	22.69	13.00
ZMAX	494040	19.00	20.45	13.07
ZMAX	494045	18.70	20.44	13.07

ALTERNATIVE 8 5-YEAR 24-HOUR

ZMAX	494050	20.00	25.00	0.00
ZMAX	494060	25.00	26.00	0.00
ZMAX	494070	18.00	19.71	13.70
ZMAX	494072	19.00	22.01	24.17
ZMAX	494074	20.00	21.05	13.12
ZMAX	494076	19.00	21.05	12.68
ZMAX	494078	21.00	22.12	12.85
ZMAX	494080	18.00	20.11	13.10
ZMAX	494100	17.00	19.06	15.18
ZMAX	494110	15.29	16.78	12.70
ZMAX	494120	18.00	19.22	13.35
ZMAX	494130	17.00	18.20	14.80
ZMAX	494140	14.50	18.19	14.82
ZMAX	494150	15.00	16.99	0.00
ZMAX	494170	18.00	19.72	13.67
ZMAX	494180	17.00	19.60	15.65
ZMAX	494185	17.00	19.56	13.80
ZMAX	494190	17.00	18.34	13.85
ZMAX	494200	15.00	16.97	0.03
ZMAX	494205	17.00	18.99	15.12
ZMAX	494210	14.87	18.80	0.00
ZMAX	494220	15.75	18.22	0.02
ZMAX	494230	16.00	18.09	0.03
ZMAX	494240	15.71	18.22	13.45
ZMAX	494250	16.70	17.98	0.00
ZMAX	495010	20.00	23.20	0.00
ZMAX	495020	15.50	18.71	28.10
ZMAX	495030	15.50	18.71	28.10
ZMAX	495035	19.00	20.34	24.98
ZMAX	495038	17.00	18.10	12.90
ZMAX	495040	16.00	18.63	12.92
ZMAX	495045	15.00	15.77	12.73
ZMAX	495050	15.50	18.34	24.92
ZMAX	495055	15.50	16.79	12.95
ZMAX	495060	14.80	15.76	12.73
ZMAX	495065	14.50	16.15	13.05
ZMAX	495070	11.50	13.33	23.27
ZMAX	495075	11.50	12.91	26.23
ZMAX	495080	13.18	13.99	0.00
ZMAX	495085	13.00	15.02	20.35
ZMAX	495090	11.42	12.99	14.20
ZMAX	495100	15.00	18.15	16.62
ZMAX	495110	14.50	17.04	12.75
ZMAX	495120	13.00	14.12	13.35
ZMAX	495125	14.42	15.96	14.05
ZMAX	495140	14.50	16.55	17.73
ZMAX	495145	14.50	16.39	240.00
ZMAX	495150	13.00	14.12	13.35
ZMAX	495152	12.50	15.08	25.55
ZMAX	495154	12.50	15.43	25.97
ZMAX	495155	12.50	15.43	25.97
ZMAX	495156	12.50	13.49	0.00
ZMAX	495160	12.50	15.34	25.58
ZMAX	495162	13.50	14.84	25.57
ZMAX	495165	13.50	15.49	25.70
ZMAX	495170	12.50	15.70	24.82
ZMAX	495180	10.45	12.41	0.00
ZMAX	495210	12.50	13.90	25.12
ZMAX	495215	12.50	14.12	13.35
ZMAX	495230	8.82	11.69	13.03
ZMAX	495235	10.50	13.33	24.80
ZMAX	495240	8.50	10.01	28.28
ZMAX	495260	13.00	15.50	23.82
ZMAX	495270	12.50	14.11	13.35
ZMAX	495275	11.50	13.10	13.50
ZMAX	495280	10.90	11.14	13.52
ZMAX	495300	13.94	15.46	14.30

ALTERNATIVE 8 5-YEAR 24-HOUR

ZMAX	495302	13.90	15.41	14.35
ZMAX	495304	13.31	15.27	13.30
ZMAX	495306	12.73	14.11	14.57
ZMAX	495308	12.18	14.02	14.85
ZMAX	495310	11.49	12.96	13.53
ZMAX	495312	10.92	12.94	13.42
ZMAX	495314	10.43	12.92	26.18
ZMAX	495316	11.80	14.11	12.53
ZMAX	495320	9.75	12.92	26.20
ZMAX	495322	9.64	14.08	17.47
ZMAX	495324	9.44	13.88	17.80
ZMAX	495326	9.30	13.44	20.12
ZMAX	495328	9.43	13.33	23.22
ZMAX	495330	9.20	13.33	23.27
ZMAX	495332	9.02	13.33	23.38
ZMAX	495334	8.90	13.15	24.78
ZMAX	495336	8.72	12.92	26.22
ZMAX	495338	8.53	12.91	26.23
ZMAX	495340	8.40	12.90	26.37
ZMAX	495342	8.23	12.90	26.40
ZMAX	495344	8.04	12.75	26.72
ZMAX	495346	7.85	12.55	27.20
ZMAX	495348	7.66	12.27	27.60
ZMAX	495350	7.47	10.83	27.92
ZMAX	495352	7.34	10.02	28.28
ZMAX	495354	7.26	9.99	28.23
ZMAX	495356	7.19	9.95	28.28
ZMAX	496010	14.50	16.24	0.12
ZMAX	496020	14.50	18.79	0.00
ZMAX	496030	14.50	16.32	0.02
ZMAX	496060	16.60	16.75	12.83
ZMAX	496065	14.00	16.28	0.10
ZMAX	496070	14.00	16.25	0.10
ZMAX	496080	14.20	17.99	0.00
ZMAX	496090	14.00	17.99	0.00
ZMAX	496100	12.50	15.91	0.07
ZMAX	496110	11.00	15.44	14.68
ZMAX	496120	13.00	15.09	14.60
ZMAX	496125	12.00	14.10	19.67
ZMAX	496130	13.00	15.37	14.70
ZMAX	496150	14.00	15.41	14.72
ZMAX	496160	11.00	14.10	19.67
ZMAX	496170	12.00	15.43	14.70
ZMAX	496175	12.00	14.85	14.63
ZMAX	496180	11.00	13.17	14.25
ZMAX	496190	11.00	13.17	14.30
ZMAX	496200	10.50	11.31	14.30
ZMAX	496232	16.00	18.00	0.00
ZMAX	496234	14.00	16.36	0.15
ZMAX	496235	15.00	15.41	0.12
ZMAX	496240	14.28	15.85	0.03
ZMAX	496245	13.50	15.18	0.12
ZMAX	496260	13.50	15.05	0.28
ZMAX	496270	12.50	13.68	0.27
ZMAX	496280	9.50	12.15	14.28
ZMAX	496310	10.50	11.37	14.30
ZMAX	496320	10.50	11.22	14.27
ZMAX	496340	4.43	10.06	14.62
ZMAX	496350	8.50	9.88	25.07
ZMAX	496360	7.50	8.97	25.27
ZMAX	496370	6.50	8.18	14.23
ZMAX	496380	5.50	8.03	15.77
ZMAX	496390	4.41	8.10	15.68
ZMAX	496395	4.50	7.89	16.13
ZMAX	496400	6.50	8.03	15.73
ZMAX	496410	-0.65	7.89	16.13
ZMAX	496420	3.50	6.88	18.18

ALTERNATIVE 8 5-YEAR 24-HOUR

ZMAX	496430	5.50	9.04	14.10
ZMAX	496440	5.50	7.82	27.10
ZMAX	496450	3.50	7.82	27.10
ZMAX	496460	5.50	9.98	26.00
ZMAX	496470	3.00	7.30	18.18
ZMAX	496480	6.50	8.35	25.10
ZMAX	496485	7.50	10.67	25.40
ZMAX	496490	3.50	8.27	24.98
ZMAX	496500	6.50	11.00	0.00
ZMAX	496510	4.50	7.41	25.10
ZMAX	496515	4.50	7.97	16.62
ZMAX	496520	5.50	7.30	18.20
ZMAX	496530	5.50	7.30	18.20
ZMAX	496540	6.50	7.30	18.18
ZMAX	496545	4.00	7.30	18.18
ZMAX	496550	4.00	7.30	18.18
ZMAX	496560	3.00	7.30	18.18
ZMAX	496570	5.50	7.30	18.20
ZMAX	496580	7.50	10.88	24.98
ZMAX	496590	4.50	7.89	16.13
ZMAX	496600	-1.88	7.30	18.12
ZMAX	496610	4.50	7.18	13.22
ZMAX	496620	4.50	7.17	13.23
ZMAX	497010	11.00	13.88	13.82
ZMAX	497020	3.50	9.94	13.95
ZMAX	497025	8.50	11.09	12.88
ZMAX	497035	6.50	10.20	13.87
ZMAX	497045	4.50	7.67	14.68
ZMAX	497050	3.50	7.66	14.70
ZMAX	497055	3.50	6.68	13.62
ZMAX	497065	1.88	5.25	14.50
ZMAX	497070	8.50	9.97	12.95
ZMAX	497080	2.06	6.03	0.00
ZMAX	497085	6.50	8.95	12.95
ZMAX	497086	6.32	9.94	28.28
ZMAX	497088	5.89	8.82	28.08
ZMAX	497090	4.32	7.76	13.47
ZMAX	497092	3.75	7.04	13.67
ZMAX	497094	2.75	6.82	13.67
ZMAX	497096	2.30	6.59	13.67
ZMAX	497098	1.85	6.37	13.67
ZMAX	497100	-0.16	6.31	13.67
ZMAX	497102	-1.57	6.27	13.67
ZMAX	497104	-2.19	6.20	13.65
ZMAX	497105	-1.00	6.19	13.65
ZMAX	497106	-1.37	4.89	21.12
ZMAX	497107	-2.07	4.85	20.53
ZMAX	497108	-0.37	4.82	19.35
ZMAX	497109	-4.75	4.89	19.28
ZMAX	497111	-3.66	4.82	19.33
ZMAX	497112	-3.66	5.01	19.32
ZMAX	497113	-5.33	5.32	19.38
ZMAX	497110	-0.19	7.02	25.12
ZMAX	497120	1.50	4.87	20.92
ZMAX	497122	4.50	5.42	13.18
ZMAX	497124	4.00	4.87	20.92
ZMAX	497130	-0.21	7.01	25.13
ZMAX	497140	4.00	6.50	0.00
ZMAX	497150	5.40	6.88	12.50
ZMAX	497160	-1.85	6.88	18.18
ZMAX	497161	-2.25	6.44	18.25
ZMAX	497162	-2.86	5.68	18.37
ZMAX	497170	-6.19	3.43	19.40
ZMAX	500010	6.94	10.77	12.72
ZMAX	500020	8.41	9.58	13.75
ZMAX	500025	6.13	9.71	12.83
ZMAX	500030	5.77	9.61	12.88

ALTERNATIVE 8 5-YEAR 24-HOUR

ZMAX	500040	5.07	9.44	12.95
ZMAX	500050	4.00	8.55	12.85
ZMAX	500110	7.43	10.42	12.70
ZMAX	500120	6.16	8.78	18.88
ZMAX	500130	8.00	10.83	13.42
ZMAX	500140	6.39	8.89	18.50
ZMAX	500210	4.00	9.58	13.92
ZMAX	500220	6.91	10.85	12.57
ZMAX	500300	5.00	9.92	12.78
ZMAX	9498000	-6.69	2.96	0.00
ZMAX	9496630	12.00	12.00	0.00
ZMAX	9493020	20.00	20.00	0.00
ZMAX	9493060	22.50	22.50	0.00
ZMAX	9493190	19.00	19.00	0.00
ZMAX	9493140	19.98	19.98	0.00
ZMAX	9493150	19.70	19.70	0.00
ZMAX	9493240	19.00	19.00	0.00
ZMAX	9495030	17.48	17.48	0.00
ZMAX	9495010	23.20	23.20	0.00
ZMAX	9495085	15.10	15.10	0.00
ZMAX	9495140	16.00	16.00	0.00
ZMAX	9495145	16.00	16.00	0.00
ZMAX	9495160	15.50	15.50	0.00
ZMAX	9496320	11.00	11.00	0.00
ZMAX	9496260	14.00	14.00	0.00
ZMAX	9494250	18.00	18.00	0.00
ZMAX	9494190	18.50	18.50	0.00
ZMAX	100043	99.00	99.00	0.00
ZMAX	100044	99.00	99.00	0.00
ZMAX	100045	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100047	99.00	99.00	0.00
ZMAX	100048	99.00	99.00	0.00
ZMAX	100049	99.00	99.00	0.00
ZMAX	100050	99.00	99.00	0.00
ZMAX	100051	99.00	99.00	0.00
ZMAX	100052	99.00	99.00	0.00
ZMAX	100053	99.00	99.00	0.00
ZMAX	100054	99.00	99.00	0.00
ZMAX	100055	99.00	99.00	0.00
ZMAX	100056	99.00	99.00	0.00
ZMAX	100057	99.00	99.00	0.00
ZMAX	100058	99.00	99.00	0.00
ZMAX	100059	99.00	99.00	0.00
ZMAX	100060	99.00	99.00	0.00
ZMAX	100061	99.00	99.00	0.00
ZMAX	100062	99.00	99.00	0.00
ZMAX	100063	99.00	99.00	0.00
ZMAX	100064	99.00	99.00	0.00
ZMAX	100065	99.00	99.00	0.00
ZMAX	100066	99.00	99.00	0.00
ZMAX	100067	99.00	99.00	0.00
ZMAX	100068	99.00	99.00	0.00
ZMAX	100069	99.00	99.00	0.00
ZMAX	100070	99.00	99.00	0.00
ZMAX	100071	99.00	99.00	0.00
ZMAX	100072	99.00	99.00	0.00
ZMAX	100073	99.00	99.00	0.00
ZMAX	100074	99.00	99.00	0.00
ZMAX	100075	99.00	99.00	0.00
ZMAX	100076	99.00	99.00	0.00
ZMAX	100077	99.00	99.00	0.00
ZMAX	100078	99.00	99.00	0.00
ZMAX	100079	99.00	99.00	0.00
ZMAX	100080	99.00	99.00	0.00
ZMAX	100081	99.00	99.00	0.00

ALTERNATIVE 8 5-YEAR 24-HOUR

ZMAX	100082	99.00	99.00	0.00
ZMAX	100083	99.00	99.00	0.00
ZMAX	100084	99.00	99.00	0.00
ZMAX	100085	99.00	99.00	0.00
ZMAX	100086	99.00	99.00	0.00
ZMAX	100087	99.00	99.00	0.00
ZMAX	100088	99.00	99.00	0.00
ZMAX	100089	99.00	99.00	0.00
ZMAX	497116	0.00	2.96	0.00
ZMAX	9498001	-6.69	0.00	0.00

ALTERNATIVE 8 25-YEAR 24-HOUR

	JUNC ID	INVT	Z_MAX	T_MAX
ZMAX	490000	24.23	28.42	23.23
ZMAX	490004	26.46	28.74	23.30
ZMAX	490002	20.93	28.40	23.22
ZMAX	490008	27.00	28.75	30.02
ZMAX	490010	26.16	28.77	27.03
ZMAX	490020	24.36	28.66	32.30
ZMAX	490030	26.46	28.67	26.00
ZMAX	490040	29.00	30.43	26.53
ZMAX	490050	25.16	28.78	15.58
ZMAX	490070	25.96	29.86	23.30
ZMAX	490071	29.00	30.10	14.08
ZMAX	490072	27.00	28.61	27.35
ZMAX	490073	30.00	32.38	13.73
ZMAX	490080	27.66	30.09	20.65
ZMAX	490090	28.00	31.09	17.40
ZMAX	490100	29.00	29.86	23.38
ZMAX	490110	26.16	30.42	21.98
ZMAX	490120	30.64	33.28	88.07
ZMAX	490130	28.96	33.31	88.05
ZMAX	490140	29.26	31.82	240.00
ZMAX	490141	31.00	32.77	26.40
ZMAX	490150	29.89	34.11	86.20
ZMAX	490160	29.77	35.55	76.17
ZMAX	490170	35.00	38.95	18.53
ZMAX	490180	32.66	38.72	29.67
ZMAX	490181	33.75	38.72	29.78
ZMAX	490200	36.66	38.92	14.87
ZMAX	490210	36.29	38.67	18.67
ZMAX	490211	39.00	40.68	15.37
ZMAX	490220	40.04	42.87	15.73
ZMAX	490221	42.00	45.25	24.38
ZMAX	490230	39.95	41.46	25.25
ZMAX	490240	26.36	31.08	20.87
ZMAX	490250	29.00	33.11	18.93
ZMAX	490251	33.00	35.73	29.92
ZMAX	490260	31.16	34.72	19.57
ZMAX	490261	34.00	36.25	13.68
ZMAX	490263	34.00	35.98	28.08
ZMAX	490264	33.00	35.25	19.08
ZMAX	490266	34.00	36.12	16.08
ZMAX	490270	35.00	38.99	14.97
ZMAX	490280	32.70	35.73	29.92
ZMAX	490281	32.70	35.73	29.90
ZMAX	490290	31.00	34.93	16.10
ZMAX	490300	31.86	34.84	17.57
ZMAX	490310	33.00	37.13	17.63
ZMAX	490320	34.00	37.98	16.77
ZMAX	490321	36.00	38.60	24.48
ZMAX	490330	37.00	38.74	15.72
ZMAX	490340	35.00	37.94	15.93
ZMAX	490350	36.00	38.77	15.67
ZMAX	490370	33.96	36.43	57.00
ZMAX	490375	35.00	38.61	54.25
ZMAX	490390	34.56	38.71	19.92
ZMAX	490391	36.80	38.00	21.57
ZMAX	490392	36.40	37.07	15.38
ZMAX	490400	37.00	39.01	16.07
ZMAX	490401	37.00	39.71	25.98
ZMAX	490410	35.46	38.61	54.18
ZMAX	490411	36.00	38.61	54.30
ZMAX	490420	35.00	40.76	48.58
ZMAX	490421	39.00	40.16	28.50
ZMAX	490422	39.00	41.18	16.93
ZMAX	490425	38.00	40.76	49.17
ZMAX	490430	35.47	41.32	28.23
ZMAX	490440	40.00	43.49	26.10

ALTERNATIVE 8 25-YEAR 24-HOUR

ZMAX	490450	39.00	40.86	25.57
ZMAX	490451	39.00	40.57	63.08
ZMAX	490453	39.00	40.57	63.08
ZMAX	490455	39.00	40.77	18.40
ZMAX	490460	43.00	46.56	27.58
ZMAX	490470	40.00	42.50	36.27
ZMAX	490480	39.67	42.50	36.17
ZMAX	490490	40.38	42.78	21.83
ZMAX	490500	41.00	45.04	35.87
ZMAX	490510	49.00	51.19	17.32
ZMAX	490520	43.47	49.71	24.33
ZMAX	490530	51.00	54.87	82.32
ZMAX	490535	56.47	58.48	15.63
ZMAX	490540	56.00	58.76	15.58
ZMAX	490550	48.00	49.84	16.68
ZMAX	490555	48.07	52.12	13.70
ZMAX	490560	49.00	50.03	16.08
ZMAX	490580	35.47	41.48	28.00
ZMAX	490590	48.37	49.84	25.68
ZMAX	490600	42.54	44.75	15.92
ZMAX	490610	39.77	42.47	26.28
ZMAX	490612	42.00	44.27	15.28
ZMAX	490620	41.70	43.14	15.70
ZMAX	490621	44.00	45.43	18.08
ZMAX	490630	42.17	45.13	22.68
ZMAX	490637	41.53	43.06	14.32
ZMAX	490638	44.12	44.62	24.58
ZMAX	490639	48.72	49.71	15.05
ZMAX	490640	37.57	41.57	26.95
ZMAX	490641	44.00	48.12	24.27
ZMAX	490642	45.16	48.40	16.60
ZMAX	490643	39.87	45.63	16.23
ZMAX	490644	47.67	49.63	15.20
ZMAX	490645	48.67	51.72	14.87
ZMAX	490646	41.53	47.77	14.02
ZMAX	490650	43.27	45.90	17.90
ZMAX	490651	48.16	50.96	16.93
ZMAX	490652	43.47	46.34	14.20
ZMAX	490654	46.00	48.44	17.00
ZMAX	490655	46.55	48.90	14.03
ZMAX	490659	45.57	49.12	15.45
ZMAX	490660	39.87	47.60	15.55
ZMAX	490661	45.57	50.45	15.18
ZMAX	490670	45.37	49.21	15.73
ZMAX	490675	41.87	49.03	15.62
ZMAX	490680	47.11	50.23	16.72
ZMAX	490690	45.49	49.30	15.95
ZMAX	490700	53.74	59.45	29.95
ZMAX	490710	47.96	52.70	27.10
ZMAX	490711	52.00	54.53	16.28
ZMAX	490720	50.00	52.67	27.00
ZMAX	490730	50.23	53.77	26.23
ZMAX	490740	49.64	54.17	16.68
ZMAX	490742	58.00	59.70	28.00
ZMAX	490743	48.76	54.22	17.32
ZMAX	490744	49.87	54.22	17.32
ZMAX	490745	57.00	59.70	28.00
ZMAX	490746	57.00	60.23	26.48
ZMAX	490750	51.30	54.18	17.95
ZMAX	490751	55.00	56.59	25.63
ZMAX	490760	50.95	54.43	24.75
ZMAX	490770	51.91	55.55	26.07
ZMAX	490771	55.00	56.66	25.73
ZMAX	490772	56.00	57.91	26.25
ZMAX	490773	56.00	59.07	25.82
ZMAX	490776	56.00	57.62	25.05
ZMAX	490779	55.00	57.37	16.63

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ZMAX	490780	54.21	57.67	22.25
ZMAX	490790	53.17	55.58	28.32
ZMAX	490791	56.00	58.61	27.17
ZMAX	490792	56.00	58.35	25.97
ZMAX	490794	56.00	57.67	29.38
ZMAX	490795	56.00	57.44	27.33
ZMAX	490800	53.17	55.96	14.97
ZMAX	490801	55.00	57.44	16.42
ZMAX	490802	56.00	58.00	25.58
ZMAX	490803	57.00	58.52	27.98
ZMAX	490804	56.00	58.52	27.70
ZMAX	490900	53.67	55.58	28.42
ZMAX	491010	22.06	25.52	14.12
ZMAX	491019	26.44	27.85	18.53
ZMAX	491020	26.14	29.05	16.60
ZMAX	491021	26.00	29.05	17.78
ZMAX	491022	27.07	29.04	17.30
ZMAX	491040	23.16	25.71	14.08
ZMAX	491041	26.86	29.46	13.87
ZMAX	491042	27.66	28.87	16.80
ZMAX	491043	27.17	28.78	16.83
ZMAX	491044	27.66	29.37	13.92
ZMAX	491060	25.96	29.82	63.62
ZMAX	491080	25.66	30.05	63.60
ZMAX	491100	28.96	31.12	62.93
ZMAX	491102	29.00	31.46	13.23
ZMAX	491120	27.86	31.87	84.13
ZMAX	491121	29.25	32.32	29.87
ZMAX	491122	32.00	33.38	13.42
ZMAX	491123	32.00	33.78	17.00
ZMAX	491140	29.62	32.47	29.55
ZMAX	491160	30.66	33.39	16.55
ZMAX	491180	32.00	35.42	26.15
ZMAX	491200	34.46	37.36	15.20
ZMAX	491220	36.97	38.44	19.33
ZMAX	491221	33.05	36.58	15.85
ZMAX	491222	36.80	38.95	13.12
ZMAX	491223	34.39	36.59	15.83
ZMAX	491240	31.00	33.19	27.75
ZMAX	491260	29.00	31.91	41.52
ZMAX	491280	29.00	32.00	38.45
ZMAX	491285	30.77	39.04	14.15
ZMAX	491300	29.00	31.92	41.52
ZMAX	491302	33.00	36.56	16.10
ZMAX	491320	32.90	36.55	15.93
ZMAX	491340	29.17	32.95	42.82
ZMAX	491344	36.00	38.48	27.60
ZMAX	491342	31.36	34.15	14.47
ZMAX	491360	33.97	36.88	16.73
ZMAX	491380	31.36	35.65	16.87
ZMAX	491382	33.00	33.59	14.38
ZMAX	491384	30.00	32.34	19.10
ZMAX	491387	34.17	39.59	25.35
ZMAX	491388	34.17	41.26	23.77
ZMAX	491390	36.63	39.63	15.52
ZMAX	491391	35.17	39.68	25.27
ZMAX	491393	42.00	45.45	23.05
ZMAX	491394	36.67	40.94	15.98
ZMAX	491395	35.27	39.68	25.27
ZMAX	491396	38.00	41.23	25.05
ZMAX	491397	32.07	39.50	25.43
ZMAX	491398	42.00	44.13	19.02
ZMAX	491399	38.00	41.28	23.77
ZMAX	491400	33.27	38.16	25.80
ZMAX	491401	36.77	42.43	14.37
ZMAX	491402	32.17	39.56	25.02
ZMAX	491404	38.96	41.29	23.82

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ZMAX	491406	36.77	40.95	15.97
ZMAX	491407	32.17	39.52	25.22
ZMAX	491392	43.00	47.53	19.02
ZMAX	491403	45.00	48.19	18.73
ZMAX	491440	38.17	39.98	20.50
ZMAX	491441	38.54	39.98	20.45
ZMAX	491460	30.71	36.68	14.35
ZMAX	491465	31.27	36.50	25.53
ZMAX	491480	33.87	36.84	13.53
ZMAX	491500	30.00	36.55	27.15
ZMAX	491501	31.17	36.54	27.22
ZMAX	491502	36.00	38.05	24.28
ZMAX	491520	38.15	41.52	13.77
ZMAX	491540	41.00	44.22	16.58
ZMAX	491541	42.00	46.58	27.38
ZMAX	491452	42.00	44.02	19.80
ZMAX	491453	37.18	40.18	13.47
ZMAX	491560	41.00	41.97	29.05
ZMAX	491561	38.00	42.12	29.68
ZMAX	491562	44.00	45.31	30.95
ZMAX	491563	39.00	42.12	29.67
ZMAX	491580	36.55	38.25	240.00
ZMAX	491600	39.73	42.59	159.15
ZMAX	491620	45.57	47.10	27.02
ZMAX	491621	48.00	50.63	27.65
ZMAX	490232	44.00	46.68	15.08
ZMAX	490431	41.00	44.60	26.55
ZMAX	490449	41.00	43.73	16.33
ZMAX	490457	39.00	40.79	18.67
ZMAX	490491	47.00	50.31	219.30
ZMAX	490492	47.00	51.03	17.72
ZMAX	490501	46.00	49.01	13.98
ZMAX	490511	48.00	50.60	28.05
ZMAX	490561	57.00	58.80	27.85
ZMAX	490581	44.00	46.11	14.50
ZMAX	490582	50.00	52.16	14.25
ZMAX	490584	50.00	52.32	25.10
ZMAX	490587	53.00	57.25	14.03
ZMAX	490701	54.00	58.71	15.35
ZMAX	490702	57.00	60.53	15.67
ZMAX	490703	53.74	55.40	14.15
ZMAX	490704	56.00	60.69	13.47
ZMAX	490713	52.00	54.37	19.92
ZMAX	490741	58.00	59.18	28.28
ZMAX	490762	56.00	59.03	25.53
ZMAX	490781	58.00	62.09	17.28
ZMAX	491274	31.22	39.06	14.17
ZMAX	491284	33.92	36.96	14.38
ZMAX	491389	39.00	40.60	20.42
ZMAX	491700	23.00	27.53	20.18
ZMAX	491701	9.70	25.35	29.83
ZMAX	491702	55.00	57.51	32.57
ZMAX	491703	25.00	27.50	15.93
ZMAX	491704	56.00	58.78	15.47
ZMAX	491705	55.80	57.51	32.57
ZMAX	491706	48.90	51.94	27.80
ZMAX	491707	45.00	46.96	30.25
ZMAX	491708	36.00	38.59	24.65
ZMAX	491709	37.00	39.24	15.80
ZMAX	491710	27.00	28.89	15.88
ZMAX	491711	24.00	26.41	25.53
ZMAX	491712	30.33	34.47	29.73
ZMAX	491713	30.00	34.07	63.27
ZMAX	491714	31.00	32.38	17.52
ZMAX	491715	40.17	42.50	36.25
ZMAX	491716	30.00	34.88	25.02
ZMAX	491717	52.00	55.24	16.38

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ZMAX	491718	34.00	36.55	14.83
ZMAX	491719	42.00	46.66	28.32
ZMAX	491720	38.00	40.61	15.87
ZMAX	491721	38.00	40.53	25.87
ZMAX	491722	39.00	39.92	17.15
ZMAX	491723	29.00	37.81	56.38
ZMAX	491724	29.00	34.88	24.98
ZMAX	491725	33.00	34.40	16.27
ZMAX	491728	30.00	35.21	15.82
ZMAX	491729	27.00	31.35	24.37
ZMAX	491730	26.00	29.87	18.22
ZMAX	491737	38.00	38.64	15.87
ZMAX	491740	37.00	38.62	15.67
ZMAX	491745	37.00	39.14	17.67
ZMAX	491746	37.00	39.08	26.35
ZMAX	491750	44.00	46.32	27.67
ZMAX	491753	49.00	51.45	21.95
ZMAX	490574	41.77	46.00	16.02
ZMAX	491405	42.00	44.60	17.08
ZMAX	490714	52.00	54.56	16.50
ZMAX	490753	51.00	54.46	29.98
ZMAX	491224	39.00	42.78	28.87
ZMAX	491225	41.50	43.96	14.92
ZMAX	491759	39.00	40.68	22.40
ZMAX	491760	39.00	40.61	22.92
ZMAX	491764	38.00	40.38	24.43
ZMAX	491768	38.00	40.29	24.43
ZMAX	499999	35.85	40.24	24.47
ZMAX	499998	35.80	40.22	24.43
ZMAX	499997	35.00	36.00	24.43
ZMAX	491002	30.84	34.07	61.32
ZMAX	491001	28.00	34.07	61.20
ZMAX	100000	99.00	99.00	0.00
ZMAX	100001	99.00	99.00	0.00
ZMAX	100002	99.00	99.00	0.00
ZMAX	100003	99.00	99.00	0.00
ZMAX	100004	99.00	99.00	0.00
ZMAX	100005	99.00	99.00	0.00
ZMAX	100006	99.00	99.00	0.00
ZMAX	100007	99.00	99.00	0.00
ZMAX	100008	99.00	99.00	0.00
ZMAX	100009	99.00	99.00	0.00
ZMAX	100010	99.00	99.00	0.00
ZMAX	100011	99.00	99.00	0.00
ZMAX	100012	99.00	99.00	0.00
ZMAX	100013	99.00	99.00	0.00
ZMAX	100014	99.00	99.00	0.00
ZMAX	100015	99.00	99.00	0.00
ZMAX	100016	99.00	99.00	0.00
ZMAX	100017	99.00	99.00	0.00
ZMAX	100018	99.00	99.00	0.00
ZMAX	100019	99.00	99.00	0.00
ZMAX	100020	99.00	99.00	0.00
ZMAX	100021	99.00	99.00	0.00
ZMAX	100022	99.00	99.00	0.00
ZMAX	100023	99.00	99.00	0.00
ZMAX	100024	99.00	99.00	0.00
ZMAX	100025	99.00	99.00	0.00
ZMAX	100026	99.00	99.00	0.00
ZMAX	100027	99.00	99.00	0.00
ZMAX	100028	99.00	99.00	0.00
ZMAX	100029	99.00	99.00	0.00
ZMAX	100030	99.00	99.00	0.00
ZMAX	100031	99.00	99.00	0.00
ZMAX	100032	99.00	99.00	0.00
ZMAX	100033	99.00	99.00	0.00
ZMAX	100034	99.00	99.00	0.00

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ZMAX	100035	99.00	99.00	0.00
ZMAX	100036	99.00	99.00	0.00
ZMAX	100037	99.00	99.00	0.00
ZMAX	100038	99.00	99.00	0.00
ZMAX	100039	99.00	99.00	0.00
ZMAX	100040	99.00	99.00	0.00
ZMAX	493010	17.00	23.49	25.48
ZMAX	493020	20.00	23.04	18.10
ZMAX	493030	18.00	24.47	13.05
ZMAX	493040	17.00	22.33	17.12
ZMAX	493060	21.00	21.50	13.27
ZMAX	493070	19.00	26.94	13.57
ZMAX	493090	18.00	23.45	25.08
ZMAX	493100	20.00	21.15	12.67
ZMAX	493110	18.00	20.02	12.90
ZMAX	493120	18.00	19.99	0.00
ZMAX	493130	17.00	20.16	12.70
ZMAX	493140	16.00	18.79	13.38
ZMAX	493150	16.00	19.40	13.03
ZMAX	493180	18.00	24.21	14.08
ZMAX	493185	19.00	24.19	14.08
ZMAX	493190	17.00	19.35	12.98
ZMAX	493195	17.00	20.16	13.05
ZMAX	493200	18.00	20.05	24.20
ZMAX	493210	18.00	19.27	12.98
ZMAX	493215	19.00	21.01	20.03
ZMAX	493220	16.00	19.14	13.10
ZMAX	493230	15.50	18.79	13.38
ZMAX	493240	16.00	19.33	27.43
ZMAX	493250	17.00	24.21	14.08
ZMAX	493260	21.00	24.19	13.65
ZMAX	493270	19.00	24.18	13.65
ZMAX	493280	19.00	23.09	13.00
ZMAX	493290	19.00	22.29	13.02
ZMAX	493310	17.00	23.87	23.67
ZMAX	493320	17.00	20.04	24.20
ZMAX	493330	17.00	20.00	24.45
ZMAX	493340	16.33	19.98	24.23
ZMAX	493350	15.50	17.76	13.03
ZMAX	493360	13.00	18.00	0.00
ZMAX	493370	14.61	18.28	13.85
ZMAX	493380	14.50	17.52	14.83
ZMAX	493390	14.50	18.09	13.43
ZMAX	493400	13.50	17.53	14.80
ZMAX	493410	12.50	17.52	14.82
ZMAX	493420	13.50	16.29	0.03
ZMAX	493430	12.44	15.97	0.08
ZMAX	493440	15.50	19.33	27.43
ZMAX	493450	18.00	19.05	14.57
ZMAX	493470	16.00	19.05	24.73
ZMAX	493480	15.50	19.09	24.68
ZMAX	493500	12.27	17.00	14.35
ZMAX	493505	12.27	16.90	16.73
ZMAX	493520	11.76	14.97	15.90
ZMAX	493525	11.00	14.88	15.78
ZMAX	493530	14.50	17.29	13.67
ZMAX	493535	15.00	17.29	13.67
ZMAX	493540	13.50	15.99	0.00
ZMAX	493545	9.65	14.82	15.73
ZMAX	493550	14.50	15.24	12.67
ZMAX	493555	13.50	14.88	13.63
ZMAX	494010	24.80	26.00	0.00
ZMAX	494020	22.90	25.59	12.67
ZMAX	494025	20.00	21.25	12.73
ZMAX	494030	22.00	22.74	13.00
ZMAX	494040	19.00	20.56	13.03
ZMAX	494045	18.70	20.56	13.03

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ZMAX	494050	20.00	25.00	0.00
ZMAX	494060	25.00	26.00	0.00
ZMAX	494070	18.00	19.88	13.68
ZMAX	494072	19.00	22.07	13.53
ZMAX	494074	20.00	21.08	12.73
ZMAX	494076	19.00	21.08	12.72
ZMAX	494078	21.00	22.18	12.73
ZMAX	494080	18.00	20.17	12.83
ZMAX	494100	17.00	19.08	15.12
ZMAX	494110	15.29	17.66	14.93
ZMAX	494120	18.00	19.32	13.43
ZMAX	494130	17.00	18.47	14.57
ZMAX	494140	14.50	18.46	14.60
ZMAX	494150	15.00	17.66	14.92
ZMAX	494170	18.00	19.89	13.65
ZMAX	494180	17.00	19.64	14.57
ZMAX	494185	17.00	19.77	13.73
ZMAX	494190	17.00	18.71	13.80
ZMAX	494200	15.00	16.97	0.03
ZMAX	494205	17.00	19.05	12.60
ZMAX	494210	14.87	18.80	0.00
ZMAX	494220	15.75	18.22	0.02
ZMAX	494230	16.00	18.12	14.12
ZMAX	494240	15.71	18.39	13.38
ZMAX	494250	16.70	17.98	0.00
ZMAX	495010	20.00	23.23	12.52
ZMAX	495020	15.50	19.33	27.43
ZMAX	495030	15.50	19.33	27.43
ZMAX	495035	19.00	21.09	24.97
ZMAX	495038	17.00	18.17	12.78
ZMAX	495040	16.00	18.70	12.88
ZMAX	495045	15.00	15.88	12.68
ZMAX	495050	15.50	18.89	24.92
ZMAX	495055	15.50	16.83	12.57
ZMAX	495060	14.80	15.87	12.70
ZMAX	495065	14.50	16.26	12.57
ZMAX	495070	11.50	13.92	17.83
ZMAX	495075	11.50	13.53	22.05
ZMAX	495080	13.18	13.99	0.00
ZMAX	495085	13.00	15.04	17.12
ZMAX	495090	11.42	13.57	21.65
ZMAX	495100	15.00	18.47	14.75
ZMAX	495110	14.50	17.09	12.50
ZMAX	495120	13.00	14.23	12.92
ZMAX	495125	14.42	16.27	14.58
ZMAX	495140	14.50	16.81	26.47
ZMAX	495145	14.50	16.81	26.47
ZMAX	495150	13.00	14.24	12.92
ZMAX	495152	12.50	16.09	25.52
ZMAX	495154	12.50	16.02	19.38
ZMAX	495155	12.50	16.02	19.38
ZMAX	495156	12.50	13.49	0.00
ZMAX	495160	12.50	16.03	24.87
ZMAX	495162	13.50	15.57	25.52
ZMAX	495165	13.50	16.01	17.57
ZMAX	495170	12.50	15.75	13.55
ZMAX	495180	10.45	12.87	23.00
ZMAX	495210	12.50	14.68	25.08
ZMAX	495215	12.50	14.23	12.93
ZMAX	495230	8.82	12.33	13.10
ZMAX	495235	10.50	13.88	24.82
ZMAX	495240	8.50	11.29	24.55
ZMAX	495260	13.00	16.05	24.57
ZMAX	495270	12.50	14.22	12.93
ZMAX	495275	11.50	13.22	12.92
ZMAX	495280	10.90	11.31	24.55
ZMAX	495300	13.94	15.71	13.67

ALTERNATIVE 8 25-YEAR 24-HOUR

ZMAX	495302	13.90	15.67	13.55
ZMAX	495304	13.31	15.60	13.22
ZMAX	495306	12.73	14.39	13.88
ZMAX	495308	12.18	14.26	14.23
ZMAX	495310	11.49	13.56	21.72
ZMAX	495312	10.92	13.55	21.82
ZMAX	495314	10.43	13.55	21.97
ZMAX	495316	11.80	14.15	12.53
ZMAX	495320	9.75	13.55	21.95
ZMAX	495322	9.64	14.74	15.77
ZMAX	495324	9.44	14.48	16.05
ZMAX	495326	9.30	14.05	17.23
ZMAX	495328	9.43	13.92	17.83
ZMAX	495330	9.20	13.92	17.83
ZMAX	495332	9.02	13.92	17.80
ZMAX	495334	8.90	13.70	19.97
ZMAX	495336	8.72	13.54	21.95
ZMAX	495338	8.53	13.53	22.05
ZMAX	495340	8.40	13.52	22.10
ZMAX	495342	8.23	13.51	22.10
ZMAX	495344	8.04	13.36	22.45
ZMAX	495346	7.85	13.23	22.65
ZMAX	495348	7.66	12.87	23.00
ZMAX	495350	7.47	11.62	24.35
ZMAX	495352	7.34	11.31	24.55
ZMAX	495354	7.26	11.30	24.55
ZMAX	495356	7.19	11.25	24.55
ZMAX	496010	14.50	16.27	14.60
ZMAX	496020	14.50	18.79	0.00
ZMAX	496030	14.50	16.32	0.02
ZMAX	496060	16.60	16.77	12.83
ZMAX	496065	14.00	16.28	0.10
ZMAX	496070	14.00	16.25	0.10
ZMAX	496080	14.20	17.99	0.00
ZMAX	496090	14.00	17.99	0.00
ZMAX	496100	12.50	15.91	0.07
ZMAX	496110	11.00	15.73	14.87
ZMAX	496120	13.00	15.31	13.30
ZMAX	496125	12.00	15.18	20.43
ZMAX	496130	13.00	15.61	14.93
ZMAX	496150	14.00	15.69	14.90
ZMAX	496160	11.00	15.18	20.43
ZMAX	496170	12.00	15.72	14.88
ZMAX	496175	12.00	14.94	14.92
ZMAX	496180	11.00	13.28	13.00
ZMAX	496190	11.00	13.27	13.00
ZMAX	496200	10.50	11.93	15.67
ZMAX	496232	16.00	18.00	0.00
ZMAX	496234	14.00	16.36	0.15
ZMAX	496235	15.00	15.41	0.12
ZMAX	496240	14.28	15.85	0.03
ZMAX	496245	13.50	15.22	13.67
ZMAX	496260	13.50	15.17	13.67
ZMAX	496270	12.50	13.85	13.57
ZMAX	496280	9.50	12.33	13.90
ZMAX	496310	10.50	11.92	15.68
ZMAX	496320	10.50	11.89	15.72
ZMAX	496340	4.43	11.88	15.70
ZMAX	496350	8.50	10.59	25.02
ZMAX	496360	7.50	9.08	13.68
ZMAX	496370	6.50	8.67	17.62
ZMAX	496380	5.50	8.66	17.58
ZMAX	496390	4.41	8.74	17.42
ZMAX	496395	4.50	8.48	18.02
ZMAX	496400	6.50	8.66	17.58
ZMAX	496410	-0.65	8.48	18.02
ZMAX	496420	3.50	8.28	18.98

ALTERNATIVE 8 25-YEAR 24-HOUR

ZMAX	496430	5.50	9.18	12.98
ZMAX	496440	5.50	8.30	19.27
ZMAX	496450	3.50	8.30	19.27
ZMAX	496460	5.50	10.10	14.18
ZMAX	496470	3.00	8.30	19.25
ZMAX	496480	6.50	10.06	15.08
ZMAX	496485	7.50	11.00	16.52
ZMAX	496490	3.50	9.02	20.33
ZMAX	496500	6.50	11.00	0.00
ZMAX	496510	4.50	8.50	240.00
ZMAX	496515	4.50	8.30	19.27
ZMAX	496520	5.50	8.30	19.25
ZMAX	496530	5.50	8.30	19.28
ZMAX	496540	6.50	8.30	19.25
ZMAX	496545	4.00	8.30	19.25
ZMAX	496550	4.00	8.30	19.25
ZMAX	496560	3.00	8.30	19.25
ZMAX	496570	5.50	8.28	19.23
ZMAX	496580	7.50	11.01	13.97
ZMAX	496590	4.50	8.48	18.02
ZMAX	496600	-1.88	8.30	19.17
ZMAX	496610	4.50	8.25	19.15
ZMAX	496620	4.50	8.23	19.12
ZMAX	497010	11.00	13.93	13.30
ZMAX	497020	3.50	10.18	24.40
ZMAX	497025	8.50	11.15	12.73
ZMAX	497035	6.50	10.48	13.15
ZMAX	497045	4.50	8.05	20.38
ZMAX	497050	3.50	8.05	20.38
ZMAX	497055	3.50	7.20	21.50
ZMAX	497065	1.88	7.20	21.50
ZMAX	497070	8.50	10.07	12.88
ZMAX	497080	2.06	7.44	19.63
ZMAX	497085	6.50	9.24	23.63
ZMAX	497086	6.32	11.24	24.55
ZMAX	497088	5.89	10.18	24.42
ZMAX	497090	4.32	9.23	23.62
ZMAX	497092	3.75	8.68	22.17
ZMAX	497094	2.75	8.53	21.58
ZMAX	497096	2.30	8.34	21.02
ZMAX	497098	1.85	8.17	20.57
ZMAX	497100	-0.16	8.04	20.37
ZMAX	497102	-1.57	7.95	20.18
ZMAX	497104	-2.19	7.81	20.02
ZMAX	497105	-1.00	7.79	19.98
ZMAX	497106	-1.37	7.42	19.58
ZMAX	497107	-2.07	7.41	19.57
ZMAX	497108	-0.37	7.39	19.57
ZMAX	497109	-4.75	7.41	19.57
ZMAX	497111	-3.66	7.40	19.57
ZMAX	497112	-3.66	7.32	19.57
ZMAX	497113	-5.33	7.21	19.57
ZMAX	497110	-0.19	8.29	18.98
ZMAX	497120	1.50	7.42	19.58
ZMAX	497122	4.50	7.42	19.60
ZMAX	497124	4.00	7.42	19.60
ZMAX	497130	-0.21	8.16	18.15
ZMAX	497140	4.00	7.44	19.63
ZMAX	497150	5.40	7.41	19.57
ZMAX	497160	-1.85	8.21	19.08
ZMAX	497161	-2.25	8.00	19.22
ZMAX	497162	-2.86	7.59	19.48
ZMAX	497170	-6.19	4.30	19.62
ZMAX	500010	6.94	11.25	12.75
ZMAX	500020	8.41	10.31	14.20
ZMAX	500025	6.13	11.05	12.95
ZMAX	500030	5.77	11.03	12.97

ALTERNATIVE 8 25-YEAR 24-HOUR

ZMAX	500040	5.07	10.55	13.03
ZMAX	500050	4.00	8.91	13.03
ZMAX	500110	7.43	11.21	12.80
ZMAX	500120	6.16	9.40	16.62
ZMAX	500130	8.00	11.89	13.52
ZMAX	500140	6.39	9.77	16.85
ZMAX	500210	4.00	10.39	13.78
ZMAX	500220	6.91	11.27	12.73
ZMAX	500300	5.00	10.08	12.68
ZMAX	9498000	-6.69	2.96	0.00
ZMAX	9496630	12.00	12.00	0.00
ZMAX	9493020	20.00	20.00	0.00
ZMAX	9493060	22.50	22.50	0.00
ZMAX	9493190	19.00	19.00	0.00
ZMAX	9493140	19.98	19.98	0.00
ZMAX	9493150	19.70	19.70	0.00
ZMAX	9493240	19.00	19.00	0.00
ZMAX	9495030	17.48	17.48	0.00
ZMAX	9495010	23.20	23.20	0.00
ZMAX	9495085	15.10	15.10	0.00
ZMAX	9495140	16.00	16.00	0.00
ZMAX	9495145	16.00	16.00	0.00
ZMAX	9495160	15.50	15.50	0.00
ZMAX	9496320	11.00	11.00	0.00
ZMAX	9496260	14.00	14.00	0.00
ZMAX	9494250	18.00	18.00	0.00
ZMAX	9494190	18.50	18.50	0.00
ZMAX	100043	99.00	99.00	0.00
ZMAX	100044	99.00	99.00	0.00
ZMAX	100045	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100047	99.00	99.00	0.00
ZMAX	100048	99.00	99.00	0.00
ZMAX	100049	99.00	99.00	0.00
ZMAX	100050	99.00	99.00	0.00
ZMAX	100051	99.00	99.00	0.00
ZMAX	100052	99.00	99.00	0.00
ZMAX	100053	99.00	99.00	0.00
ZMAX	100054	99.00	99.00	0.00
ZMAX	100055	99.00	99.00	0.00
ZMAX	100056	99.00	99.00	0.00
ZMAX	100057	99.00	99.00	0.00
ZMAX	100058	99.00	99.00	0.00
ZMAX	100059	99.00	99.00	0.00
ZMAX	100060	99.00	99.00	0.00
ZMAX	100061	99.00	99.00	0.00
ZMAX	100062	99.00	99.00	0.00
ZMAX	100063	99.00	99.00	0.00
ZMAX	100064	99.00	99.00	0.00
ZMAX	100065	99.00	99.00	0.00
ZMAX	100066	99.00	99.00	0.00
ZMAX	100067	99.00	99.00	0.00
ZMAX	100068	99.00	99.00	0.00
ZMAX	100069	99.00	99.00	0.00
ZMAX	100070	99.00	99.00	0.00
ZMAX	100071	99.00	99.00	0.00
ZMAX	100072	99.00	99.00	0.00
ZMAX	100073	99.00	99.00	0.00
ZMAX	100074	99.00	99.00	0.00
ZMAX	100075	99.00	99.00	0.00
ZMAX	100076	99.00	99.00	0.00
ZMAX	100077	99.00	99.00	0.00
ZMAX	100078	99.00	99.00	0.00
ZMAX	100079	99.00	99.00	0.00
ZMAX	100080	99.00	99.00	0.00
ZMAX	100081	99.00	99.00	0.00

ALTERNATIVE 8 25-YEAR 24-HOUR

ZMAX	100082	99.00	99.00	0.00
ZMAX	100083	99.00	99.00	0.00
ZMAX	100084	99.00	99.00	0.00
ZMAX	100085	99.00	99.00	0.00
ZMAX	100086	99.00	99.00	0.00
ZMAX	100087	99.00	99.00	0.00
ZMAX	100088	99.00	99.00	0.00
ZMAX	100089	99.00	99.00	0.00
ZMAX	497116	0.00	7.42	19.58
ZMAX	9498001	-6.69	0.00	0.00

Alternative C1

ALTERNATIVE C1 5-YEAR 24-HOUR

	JUNC ID	INVT	Z_MAX	T_MAX
ZMAX	490000	24.23	26.46	0.00
ZMAX	490004	26.46	27.84	25.85
ZMAX	490002	20.93	26.14	29.05
ZMAX	490008	27.00	28.09	29.87
ZMAX	490010	26.16	28.19	39.67
ZMAX	490020	24.36	28.20	26.73
ZMAX	490030	26.46	28.14	25.25
ZMAX	490040	29.00	29.90	26.57
ZMAX	490050	25.16	28.39	15.43
ZMAX	490070	25.96	29.13	26.62
ZMAX	490071	29.00	29.91	14.60
ZMAX	490072	27.00	28.02	27.30
ZMAX	490073	30.00	32.31	14.45
ZMAX	490080	27.66	29.13	27.27
ZMAX	490090	28.00	30.71	27.40
ZMAX	490100	29.00	29.69	14.10
ZMAX	490110	26.16	29.70	25.18
ZMAX	490120	30.64	33.01	69.37
ZMAX	490130	28.96	33.02	69.32
ZMAX	490140	29.26	31.53	240.00
ZMAX	490141	31.00	32.13	26.37
ZMAX	490150	29.89	33.27	67.15
ZMAX	490160	29.77	34.52	59.60
ZMAX	490170	35.00	38.56	26.23
ZMAX	490180	32.66	37.49	26.72
ZMAX	490181	33.75	37.49	26.82
ZMAX	490200	36.66	38.56	26.23
ZMAX	490210	36.29	38.35	0.00
ZMAX	490211	39.00	40.60	17.20
ZMAX	490220	40.04	42.02	15.35
ZMAX	490221	42.00	44.50	30.53
ZMAX	490230	39.95	40.97	25.65
ZMAX	490240	26.36	30.28	24.42
ZMAX	490250	29.00	32.36	21.48
ZMAX	490251	33.00	34.78	29.83
ZMAX	490260	31.16	33.28	16.17
ZMAX	490261	34.00	36.08	13.83
ZMAX	490263	34.00	35.25	28.05
ZMAX	490264	33.00	34.83	24.37
ZMAX	490266	34.00	35.80	16.42
ZMAX	490270	35.00	37.74	14.40
ZMAX	490280	32.70	34.78	29.83
ZMAX	490281	32.70	34.78	29.75
ZMAX	490290	31.00	34.39	16.30
ZMAX	490300	31.86	33.17	13.50
ZMAX	490310	33.00	36.26	18.32
ZMAX	490320	34.00	37.76	20.60
ZMAX	490321	36.00	38.24	37.90
ZMAX	490330	37.00	38.66	27.77
ZMAX	490340	35.00	37.83	14.20
ZMAX	490350	36.00	38.67	25.85
ZMAX	490370	33.96	35.92	25.73
ZMAX	490375	35.00	38.08	57.10
ZMAX	490390	34.56	37.97	24.93
ZMAX	490391	36.80	37.26	26.05
ZMAX	490392	36.40	36.82	15.00
ZMAX	490400	37.00	38.89	25.85
ZMAX	490401	37.00	39.37	25.98
ZMAX	490410	35.46	38.08	57.08
ZMAX	490411	36.00	38.08	57.08
ZMAX	490420	35.00	40.20	50.95
ZMAX	490421	39.00	39.74	28.53
ZMAX	490422	39.00	41.05	25.17
ZMAX	490425	38.00	40.20	51.63
ZMAX	490430	35.47	40.69	26.00
ZMAX	490440	40.00	42.84	26.75

ALTERNATIVE C1 5-YEAR 24-HOUR

ZMAX	490450	39.00	40.58	57.92
ZMAX	490451	39.00	40.14	29.65
ZMAX	490453	39.00	40.14	31.75
ZMAX	490455	39.00	40.60	21.83
ZMAX	490460	43.00	45.73	27.53
ZMAX	490470	40.00	41.74	25.50
ZMAX	490480	39.67	42.00	0.00
ZMAX	490490	40.38	42.30	19.83
ZMAX	490500	41.00	44.61	59.72
ZMAX	490510	49.00	50.73	17.83
ZMAX	490520	43.47	48.11	27.60
ZMAX	490530	51.00	54.16	83.12
ZMAX	490535	56.47	57.94	16.12
ZMAX	490540	56.00	58.17	16.05
ZMAX	490550	48.00	49.28	17.52
ZMAX	490555	48.07	51.02	13.92
ZMAX	490560	49.00	49.74	16.27
ZMAX	490580	35.47	40.81	25.98
ZMAX	490590	48.37	49.31	26.27
ZMAX	490600	42.54	44.45	25.78
ZMAX	490610	39.77	41.38	27.08
ZMAX	490612	42.00	44.20	27.75
ZMAX	490620	41.70	42.88	16.80
ZMAX	490621	44.00	45.18	27.30
ZMAX	490630	42.17	44.53	20.53
ZMAX	490637	41.53	42.43	14.78
ZMAX	490638	44.12	44.50	24.82
ZMAX	490639	48.72	49.21	14.53
ZMAX	490640	37.57	40.86	25.33
ZMAX	490641	44.00	46.73	24.48
ZMAX	490642	45.16	47.24	16.32
ZMAX	490643	39.87	44.93	16.70
ZMAX	490644	47.67	49.21	14.60
ZMAX	490645	48.67	51.27	24.60
ZMAX	490646	41.53	47.31	14.48
ZMAX	490650	43.27	45.09	19.27
ZMAX	490651	48.16	50.18	16.65
ZMAX	490652	43.47	46.22	13.98
ZMAX	490654	46.00	48.13	26.82
ZMAX	490655	46.55	48.83	14.98
ZMAX	490659	45.57	48.11	14.32
ZMAX	490660	39.87	46.11	14.37
ZMAX	490661	45.57	49.72	16.63
ZMAX	490670	45.37	48.30	14.27
ZMAX	490675	41.87	48.11	14.30
ZMAX	490680	47.11	49.55	16.67
ZMAX	490690	45.49	48.39	14.18
ZMAX	490700	53.74	58.68	29.58
ZMAX	490710	47.96	52.09	27.78
ZMAX	490711	52.00	54.43	21.28
ZMAX	490720	50.00	52.14	27.97
ZMAX	490730	50.23	52.56	25.45
ZMAX	490740	49.64	53.25	17.57
ZMAX	490742	58.00	59.32	14.05
ZMAX	490743	48.76	53.27	18.00
ZMAX	490744	49.87	53.27	18.00
ZMAX	490745	57.00	59.15	29.72
ZMAX	490746	57.00	59.23	26.50
ZMAX	490750	51.30	53.51	16.03
ZMAX	490751	55.00	56.23	25.60
ZMAX	490760	50.95	53.93	20.07
ZMAX	490770	51.91	55.20	27.10
ZMAX	490771	55.00	56.06	25.68
ZMAX	490772	56.00	57.26	26.22
ZMAX	490773	56.00	58.54	25.82
ZMAX	490776	56.00	57.12	27.18
ZMAX	490779	55.00	57.10	24.95

ALTERNATIVE C1 5-YEAR 24-HOUR

ZMAX	490780	54.21	57.06	20.42
ZMAX	490790	53.17	55.16	41.82
ZMAX	490791	56.00	57.79	27.22
ZMAX	490792	56.00	57.63	26.03
ZMAX	490794	56.00	57.24	29.38
ZMAX	490795	56.00	56.98	27.40
ZMAX	490800	53.17	55.62	14.60
ZMAX	490801	55.00	57.11	25.08
ZMAX	490802	56.00	57.35	25.72
ZMAX	490803	57.00	57.89	28.22
ZMAX	490804	56.00	57.89	27.72
ZMAX	490900	53.67	55.16	41.90
ZMAX	491010	22.06	24.94	14.25
ZMAX	491019	26.44	27.43	17.70
ZMAX	491020	26.14	28.53	16.78
ZMAX	491021	26.00	28.54	17.08
ZMAX	491022	27.07	28.53	16.93
ZMAX	491040	23.16	25.04	14.20
ZMAX	491041	26.86	29.01	13.92
ZMAX	491042	27.66	28.61	16.12
ZMAX	491043	27.17	28.39	16.33
ZMAX	491044	27.66	28.94	13.97
ZMAX	491060	25.96	28.98	116.38
ZMAX	491080	25.66	29.01	116.38
ZMAX	491100	28.96	30.31	96.63
ZMAX	491102	29.00	31.08	13.28
ZMAX	491120	27.86	30.30	78.73
ZMAX	491121	29.25	32.22	42.45
ZMAX	491122	32.00	33.30	13.50
ZMAX	491123	32.00	33.51	17.65
ZMAX	491140	29.62	32.27	42.22
ZMAX	491160	30.66	32.57	17.13
ZMAX	491180	32.00	34.31	25.73
ZMAX	491200	34.46	36.56	14.65
ZMAX	491220	36.97	38.07	19.53
ZMAX	491221	33.05	36.27	14.00
ZMAX	491222	36.80	38.34	13.12
ZMAX	491223	34.39	36.28	13.98
ZMAX	491240	31.00	32.45	27.82
ZMAX	491260	29.00	31.14	86.48
ZMAX	491280	29.00	31.31	84.15
ZMAX	491285	30.77	38.29	14.47
ZMAX	491300	29.00	31.31	84.15
ZMAX	491302	33.00	36.22	18.52
ZMAX	491320	32.90	36.23	14.03
ZMAX	491340	29.17	31.70	35.60
ZMAX	491344	36.00	37.90	27.73
ZMAX	491342	31.36	34.00	14.92
ZMAX	491360	33.97	36.54	16.25
ZMAX	491380	31.36	35.21	17.23
ZMAX	491382	33.00	33.42	14.47
ZMAX	491384	30.00	32.09	26.75
ZMAX	491387	34.17	38.94	49.90
ZMAX	491388	34.17	40.79	26.65
ZMAX	491390	36.63	38.94	49.27
ZMAX	491391	35.17	38.97	49.23
ZMAX	491393	42.00	44.71	19.67
ZMAX	491394	36.67	40.02	17.42
ZMAX	491395	35.27	38.97	49.23
ZMAX	491396	38.00	40.30	27.32
ZMAX	491397	32.07	38.93	49.88
ZMAX	491398	42.00	44.02	41.60
ZMAX	491399	38.00	40.79	26.65
ZMAX	491400	33.27	35.12	13.50
ZMAX	491401	36.77	42.20	14.83
ZMAX	491402	32.17	38.94	49.30
ZMAX	491404	38.96	40.79	27.17

ALTERNATIVE C1 5-YEAR 24-HOUR

ZMAX	491406	36.77	40.02	17.37
ZMAX	491407	32.17	38.93	50.08
ZMAX	491392	43.00	47.25	27.48
ZMAX	491403	45.00	48.01	29.82
ZMAX	491440	38.17	39.66	27.67
ZMAX	491441	38.54	39.66	27.65
ZMAX	491460	30.71	35.80	24.70
ZMAX	491465	31.27	35.83	25.22
ZMAX	491480	33.87	36.50	13.55
ZMAX	491500	30.00	35.85	26.38
ZMAX	491501	31.17	35.84	26.03
ZMAX	491502	36.00	37.76	27.88
ZMAX	491520	38.15	40.01	13.38
ZMAX	491540	41.00	43.84	27.87
ZMAX	491541	42.00	45.46	27.55
ZMAX	491452	42.00	43.55	26.18
ZMAX	491453	37.18	39.41	13.48
ZMAX	491560	41.00	41.59	28.95
ZMAX	491561	38.00	41.35	29.92
ZMAX	491562	44.00	44.85	31.13
ZMAX	491563	39.00	41.35	29.92
ZMAX	491580	36.55	37.57	28.97
ZMAX	491600	39.73	41.37	240.00
ZMAX	491620	45.57	46.63	28.27
ZMAX	491621	48.00	50.20	27.60
ZMAX	490232	44.00	46.41	16.42
ZMAX	490431	41.00	44.07	26.53
ZMAX	490449	41.00	43.29	17.73
ZMAX	490457	39.00	40.61	22.20
ZMAX	490491	47.00	48.42	29.25
ZMAX	490492	47.00	50.25	29.27
ZMAX	490501	46.00	48.82	14.10
ZMAX	490511	48.00	49.65	28.08
ZMAX	490561	57.00	58.11	27.78
ZMAX	490581	44.00	45.94	15.03
ZMAX	490582	50.00	51.82	18.60
ZMAX	490584	50.00	51.51	26.03
ZMAX	490587	53.00	56.61	16.95
ZMAX	490701	54.00	58.55	20.10
ZMAX	490702	57.00	60.42	25.63
ZMAX	490703	53.74	55.00	14.12
ZMAX	490704	56.00	60.39	14.15
ZMAX	490713	52.00	53.82	29.12
ZMAX	490741	58.00	58.74	28.33
ZMAX	490762	56.00	58.18	27.28
ZMAX	490781	58.00	61.75	17.97
ZMAX	491274	31.22	38.40	14.72
ZMAX	491284	33.92	36.06	14.38
ZMAX	491389	39.00	40.35	27.20
ZMAX	491700	23.00	26.12	24.52
ZMAX	491701	9.70	24.05	37.10
ZMAX	491702	55.00	56.74	35.83
ZMAX	491703	25.00	27.31	18.43
ZMAX	491704	56.00	58.66	16.53
ZMAX	491705	55.80	56.74	35.83
ZMAX	491706	48.90	51.25	27.72
ZMAX	491707	45.00	46.40	30.12
ZMAX	491708	36.00	38.27	28.08
ZMAX	491709	37.00	39.09	16.23
ZMAX	491710	27.00	28.65	16.65
ZMAX	491711	24.00	25.42	40.30
ZMAX	491712	30.33	33.33	29.95
ZMAX	491713	30.00	33.34	30.13
ZMAX	491714	31.00	32.02	21.07
ZMAX	491715	40.17	41.74	25.38
ZMAX	491716	30.00	34.36	28.57
ZMAX	491717	52.00	55.10	26.70

ALTERNATIVE C1 5-YEAR 24-HOUR

ZMAX	491718	34.00	36.29	15.75
ZMAX	491719	42.00	45.70	28.52
ZMAX	491720	38.00	40.31	16.47
ZMAX	491721	38.00	39.98	25.93
ZMAX	491722	39.00	39.57	16.95
ZMAX	491723	29.00	37.08	39.95
ZMAX	491724	29.00	34.36	28.88
ZMAX	491725	33.00	33.95	16.62
ZMAX	491728	30.00	34.61	27.77
ZMAX	491729	27.00	30.19	27.33
ZMAX	491730	26.00	29.17	22.00
ZMAX	491737	38.00	38.53	16.62
ZMAX	491740	37.00	38.49	16.32
ZMAX	491745	37.00	38.92	21.35
ZMAX	491746	37.00	38.72	28.12
ZMAX	491750	44.00	45.43	27.72
ZMAX	491753	49.00	50.77	29.85
ZMAX	490574	41.77	45.22	15.65
ZMAX	491405	42.00	44.34	28.37
ZMAX	490714	52.00	54.09	17.12
ZMAX	490753	51.00	53.78	28.50
ZMAX	491224	39.00	41.41	28.83
ZMAX	491225	41.50	43.41	14.97
ZMAX	491759	39.00	40.31	21.92
ZMAX	491760	39.00	40.27	22.13
ZMAX	491764	38.00	40.00	20.45
ZMAX	491768	38.00	39.63	22.73
ZMAX	499999	35.85	39.59	22.75
ZMAX	499998	35.80	39.58	22.73
ZMAX	499997	35.00	35.80	22.73
ZMAX	491002	30.84	33.34	30.13
ZMAX	491001	28.00	33.34	31.05
ZMAX	100000	99.00	99.00	0.00
ZMAX	100001	99.00	99.00	0.00
ZMAX	100002	99.00	99.00	0.00
ZMAX	100003	99.00	99.00	0.00
ZMAX	100004	99.00	99.00	0.00
ZMAX	100005	99.00	99.00	0.00
ZMAX	100006	99.00	99.00	0.00
ZMAX	100007	99.00	99.00	0.00
ZMAX	100008	99.00	99.00	0.00
ZMAX	100009	99.00	99.00	0.00
ZMAX	100010	99.00	99.00	0.00
ZMAX	100011	99.00	99.00	0.00
ZMAX	100012	99.00	99.00	0.00
ZMAX	100013	99.00	99.00	0.00
ZMAX	100014	99.00	99.00	0.00
ZMAX	100015	99.00	99.00	0.00
ZMAX	100016	99.00	99.00	0.00
ZMAX	100017	99.00	99.00	0.00
ZMAX	100018	99.00	99.00	0.00
ZMAX	100019	99.00	99.00	0.00
ZMAX	100020	99.00	99.00	0.00
ZMAX	100021	99.00	99.00	0.00
ZMAX	100022	99.00	99.00	0.00
ZMAX	100023	99.00	99.00	0.00
ZMAX	100024	99.00	99.00	0.00
ZMAX	100025	99.00	99.00	0.00
ZMAX	100026	99.00	99.00	0.00
ZMAX	100027	99.00	99.00	0.00
ZMAX	100028	99.00	99.00	0.00
ZMAX	100029	99.00	99.00	0.00
ZMAX	100030	99.00	99.00	0.00
ZMAX	100031	99.00	99.00	0.00
ZMAX	100032	99.00	99.00	0.00
ZMAX	100033	99.00	99.00	0.00
ZMAX	100034	99.00	99.00	0.00

ALTERNATIVE C1 5-YEAR 24-HOUR

ZMAX	100035	99.00	99.00	0.00
ZMAX	100036	99.00	99.00	0.00
ZMAX	100037	99.00	99.00	0.00
ZMAX	100038	99.00	99.00	0.00
ZMAX	100039	99.00	99.00	0.00
ZMAX	100040	99.00	99.00	0.00
ZMAX	493010	17.00	22.66	25.45
ZMAX	493020	20.00	22.62	27.23
ZMAX	493030	18.00	24.41	13.30
ZMAX	493040	17.00	22.11	21.47
ZMAX	493060	21.00	21.45	13.35
ZMAX	493070	19.00	25.64	13.65
ZMAX	493090	18.00	22.29	25.08
ZMAX	493100	20.00	21.11	12.67
ZMAX	493110	18.00	19.93	12.95
ZMAX	493120	18.00	20.00	0.00
ZMAX	493130	17.00	20.08	13.00
ZMAX	493140	16.00	18.43	13.70
ZMAX	493150	16.00	19.33	13.83
ZMAX	493180	18.00	24.08	14.90
ZMAX	493185	19.00	23.23	18.43
ZMAX	493190	17.00	19.21	13.03
ZMAX	493195	17.00	20.06	13.65
ZMAX	493200	18.00	19.75	13.65
ZMAX	493210	18.00	19.18	13.03
ZMAX	493215	19.00	20.75	25.27
ZMAX	493220	16.00	18.96	13.32
ZMAX	493230	15.50	18.43	13.70
ZMAX	493240	16.00	19.06	14.82
ZMAX	493250	17.00	24.08	14.90
ZMAX	493260	21.00	24.08	14.97
ZMAX	493270	19.00	24.07	14.97
ZMAX	493280	19.00	23.06	13.03
ZMAX	493290	19.00	22.23	15.38
ZMAX	493310	17.00	21.71	29.07
ZMAX	493320	17.00	19.80	0.00
ZMAX	493330	17.00	19.80	13.28
ZMAX	493340	16.33	19.74	13.65
ZMAX	493350	15.50	17.69	13.17
ZMAX	493360	13.00	18.00	0.00
ZMAX	493370	14.61	17.75	13.97
ZMAX	493380	14.50	17.11	16.92
ZMAX	493390	14.50	17.86	13.77
ZMAX	493400	13.50	17.11	16.90
ZMAX	493410	12.50	17.11	16.90
ZMAX	493420	13.50	16.28	0.03
ZMAX	493430	12.44	15.94	0.07
ZMAX	493440	15.50	18.71	28.45
ZMAX	493450	18.00	18.98	14.05
ZMAX	493470	16.00	18.98	14.07
ZMAX	493480	15.50	19.00	14.03
ZMAX	493500	12.27	16.34	14.28
ZMAX	493505	12.27	14.79	16.15
ZMAX	493520	11.76	14.27	17.03
ZMAX	493525	11.00	14.23	17.15
ZMAX	493530	14.50	17.13	16.60
ZMAX	493535	15.00	17.13	16.60
ZMAX	493540	13.50	16.00	0.00
ZMAX	493545	9.65	14.22	17.15
ZMAX	493550	14.50	15.20	12.70
ZMAX	493555	13.50	14.81	12.50
ZMAX	494010	24.80	26.00	0.00
ZMAX	494020	22.90	25.55	12.93
ZMAX	494025	20.00	21.16	12.95
ZMAX	494030	22.00	22.69	13.00
ZMAX	494040	19.00	20.45	13.07
ZMAX	494045	18.70	20.44	13.07

ALTERNATIVE C1 5-YEAR 24-HOUR

ZMAX	494050	20.00	25.00	0.00
ZMAX	494060	25.00	26.00	0.00
ZMAX	494070	18.00	19.71	13.70
ZMAX	494072	19.00	22.01	24.17
ZMAX	494074	20.00	21.05	13.12
ZMAX	494076	19.00	21.05	12.68
ZMAX	494078	21.00	22.12	12.85
ZMAX	494080	18.00	20.11	13.10
ZMAX	494100	17.00	19.06	15.18
ZMAX	494110	15.29	17.18	14.35
ZMAX	494120	18.00	19.22	13.35
ZMAX	494130	17.00	18.38	14.02
ZMAX	494140	14.50	18.37	14.03
ZMAX	494150	15.00	17.17	14.33
ZMAX	494170	18.00	19.72	13.67
ZMAX	494180	17.00	19.60	15.65
ZMAX	494185	17.00	19.56	13.80
ZMAX	494190	17.00	18.34	13.85
ZMAX	494200	15.00	16.97	0.03
ZMAX	494205	17.00	18.99	15.12
ZMAX	494210	14.87	18.80	0.00
ZMAX	494220	15.75	18.22	0.02
ZMAX	494230	16.00	18.09	0.03
ZMAX	494240	15.71	18.22	13.45
ZMAX	494250	16.70	18.00	0.00
ZMAX	495010	20.00	23.20	0.00
ZMAX	495020	15.50	18.71	28.10
ZMAX	495030	15.50	18.71	28.10
ZMAX	495035	19.00	20.34	24.98
ZMAX	495038	17.00	18.10	12.90
ZMAX	495040	16.00	18.63	12.92
ZMAX	495045	15.00	15.77	12.73
ZMAX	495050	15.50	18.34	24.92
ZMAX	495055	15.50	16.79	12.95
ZMAX	495060	14.80	15.76	12.73
ZMAX	495065	14.50	16.15	13.05
ZMAX	495070	11.50	12.84	13.27
ZMAX	495075	11.50	12.50	0.00
ZMAX	495080	13.18	14.00	0.00
ZMAX	495085	13.00	15.02	20.35
ZMAX	495090	11.42	12.99	14.20
ZMAX	495100	15.00	17.34	14.07
ZMAX	495110	14.50	17.04	12.75
ZMAX	495120	13.00	14.12	13.35
ZMAX	495125	14.42	16.08	14.73
ZMAX	495140	14.50	16.55	17.73
ZMAX	495145	14.50	16.39	240.00
ZMAX	495150	13.00	14.12	13.35
ZMAX	495152	12.50	15.08	25.55
ZMAX	495154	12.50	15.43	25.97
ZMAX	495155	12.50	15.43	25.97
ZMAX	495156	12.50	13.50	0.00
ZMAX	495160	1.50	7.53	21.62
ZMAX	495162	13.50	14.84	25.57
ZMAX	495165	13.50	15.49	25.70
ZMAX	495170	8.00	11.33	13.23
ZMAX	495180	10.45	12.48	0.00
ZMAX	495210	12.50	13.90	25.12
ZMAX	495215	12.50	14.12	13.35
ZMAX	495230	8.82	11.69	13.03
ZMAX	495235	10.50	13.33	24.80
ZMAX	495240	8.50	10.10	13.85
ZMAX	495260	13.00	15.50	23.82
ZMAX	495270	12.50	14.11	13.35
ZMAX	495275	11.50	13.10	13.50
ZMAX	495280	10.90	11.14	13.52
ZMAX	495300	13.94	15.50	15.18

ALTERNATIVE C1 5-YEAR 24-HOUR

ZMAX	495302	13.90	15.44	15.27
ZMAX	495304	13.31	15.27	13.30
ZMAX	495306	12.73	14.10	14.77
ZMAX	495308	12.18	14.02	15.60
ZMAX	495310	11.49	12.96	13.53
ZMAX	495312	10.92	12.94	13.42
ZMAX	495314	10.43	12.32	17.98
ZMAX	495316	11.80	14.11	12.53
ZMAX	495320	9.75	12.31	18.05
ZMAX	495322	9.64	13.45	17.52
ZMAX	495324	9.44	13.28	17.65
ZMAX	495326	9.30	12.86	18.42
ZMAX	495328	9.43	12.83	13.47
ZMAX	495330	9.20	12.84	13.27
ZMAX	495332	9.02	12.75	19.13
ZMAX	495334	8.90	12.53	19.68
ZMAX	495336	8.72	12.22	21.32
ZMAX	495338	8.53	12.21	21.35
ZMAX	495340	8.40	12.20	21.38
ZMAX	495342	8.23	12.19	21.40
ZMAX	495344	8.04	11.39	13.23
ZMAX	495346	7.85	11.64	13.10
ZMAX	495348	7.66	11.52	13.28
ZMAX	495350	7.47	10.36	13.63
ZMAX	495352	7.34	10.10	13.85
ZMAX	495354	7.26	10.16	13.73
ZMAX	495356	7.19	10.07	13.87
ZMAX	496010	14.50	16.24	0.12
ZMAX	496020	14.50	18.80	0.00
ZMAX	496030	14.50	16.32	0.03
ZMAX	496060	16.60	16.75	12.83
ZMAX	496065	14.00	16.28	0.10
ZMAX	496070	14.00	16.25	0.10
ZMAX	496080	14.20	18.00	0.00
ZMAX	496090	14.00	18.00	0.00
ZMAX	496100	12.50	15.91	0.07
ZMAX	496110	11.00	15.56	15.10
ZMAX	496120	13.00	15.09	14.60
ZMAX	496125	12.00	14.41	21.60
ZMAX	496130	13.00	15.47	15.17
ZMAX	496150	14.00	15.52	15.13
ZMAX	496160	11.00	14.41	21.60
ZMAX	496170	12.00	15.55	15.12
ZMAX	496175	12.00	14.89	15.15
ZMAX	496180	11.00	13.19	15.42
ZMAX	496190	11.00	13.19	15.42
ZMAX	496200	10.50	11.38	15.07
ZMAX	496232	16.00	18.00	0.00
ZMAX	496234	14.00	16.36	0.15
ZMAX	496235	15.00	15.40	0.12
ZMAX	496240	14.28	15.82	0.03
ZMAX	496245	13.50	15.16	0.13
ZMAX	496260	13.50	15.03	0.30
ZMAX	496270	12.50	13.66	0.28
ZMAX	496280	9.50	12.15	14.28
ZMAX	496310	10.50	11.37	14.30
ZMAX	496320	10.50	11.22	14.27
ZMAX	496340	4.43	10.46	15.22
ZMAX	496350	8.50	9.88	25.07
ZMAX	496360	7.50	8.97	25.27
ZMAX	496370	6.50	8.24	16.42
ZMAX	496380	5.50	8.24	16.33
ZMAX	496390	4.41	8.31	16.25
ZMAX	496395	4.50	8.09	16.47
ZMAX	496400	6.50	8.24	16.30
ZMAX	496410	-0.65	8.09	16.47
ZMAX	496420	3.50	7.13	17.78

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ZMAX	496430	5.50	9.04	14.10
ZMAX	496440	5.50	7.82	27.10
ZMAX	496450	3.50	7.82	27.10
ZMAX	496460	5.50	9.98	26.00
ZMAX	496470	3.00	7.52	18.57
ZMAX	496480	6.50	8.35	25.10
ZMAX	496485	7.50	10.67	25.40
ZMAX	496490	3.50	8.27	24.98
ZMAX	496500	6.50	11.00	0.00
ZMAX	496510	4.50	7.41	25.10
ZMAX	496515	4.50	7.97	16.62
ZMAX	496520	5.50	7.52	18.58
ZMAX	496530	5.50	7.52	18.58
ZMAX	496540	6.50	7.52	18.58
ZMAX	496545	4.00	7.52	18.58
ZMAX	496550	4.00	7.52	18.58
ZMAX	496560	3.00	7.52	18.57
ZMAX	496570	5.50	7.52	18.58
ZMAX	496580	7.50	10.88	24.98
ZMAX	496590	4.50	8.09	16.47
ZMAX	496600	-1.88	7.51	18.50
ZMAX	496610	4.50	7.18	13.22
ZMAX	496620	4.50	7.17	13.23
ZMAX	497010	11.00	13.88	13.82
ZMAX	497020	3.50	9.94	13.95
ZMAX	497025	8.50	11.09	12.88
ZMAX	497035	6.50	10.20	13.87
ZMAX	497045	4.50	7.67	14.68
ZMAX	497050	3.50	7.66	14.70
ZMAX	497055	3.50	6.68	13.62
ZMAX	497065	1.88	5.09	14.30
ZMAX	497070	8.50	9.97	12.95
ZMAX	497080	2.06	6.03	0.00
ZMAX	497085	6.50	9.73	15.22
ZMAX	497086	6.32	10.07	13.88
ZMAX	497088	5.89	9.83	15.05
ZMAX	497090	4.32	9.73	15.20
ZMAX	497092	3.75	8.74	15.83
ZMAX	497094	2.75	8.31	15.97
ZMAX	497096	2.30	7.92	16.10
ZMAX	497098	1.85	7.80	16.12
ZMAX	497100	-0.16	6.20	16.10
ZMAX	497102	-1.57	5.61	15.00
ZMAX	497104	-2.19	5.47	15.03
ZMAX	497105	-1.00	5.46	15.03
ZMAX	497106	-1.37	4.89	18.23
ZMAX	497107	-2.07	4.87	18.22
ZMAX	497108	-0.37	4.86	18.30
ZMAX	497109	-4.75	4.95	18.23
ZMAX	497111	-3.66	4.89	18.27
ZMAX	497112	-3.66	5.07	17.98
ZMAX	497113	-5.33	5.48	18.30
ZMAX	497110	-0.19	7.08	23.18
ZMAX	497120	1.50	4.88	18.23
ZMAX	497122	4.50	5.42	13.18
ZMAX	497124	4.00	4.88	18.23
ZMAX	497130	-0.21	7.05	17.10
ZMAX	497140	4.00	6.50	0.00
ZMAX	497150	5.40	6.88	12.50
ZMAX	497160	-1.85	7.11	17.88
ZMAX	497161	-2.25	6.65	17.93
ZMAX	497162	-2.86	5.83	18.10
ZMAX	497170	-6.19	3.47	18.22
ZMAX	500010	6.94	10.77	12.72
ZMAX	500020	8.41	9.59	13.77
ZMAX	500025	6.13	9.70	12.83
ZMAX	500030	5.77	9.61	12.88

ALTERNATIVE C1 5-YEAR 24-HOUR

ZMAX	500040	5.07	9.44	12.97
ZMAX	500050	4.00	8.55	12.85
ZMAX	500110	7.43	10.42	12.73
ZMAX	500120	6.16	9.56	17.52
ZMAX	500130	8.00	10.81	13.42
ZMAX	500140	6.39	9.57	18.08
ZMAX	500210	4.00	9.58	18.38
ZMAX	500220	6.91	10.84	12.57
ZMAX	500300	5.00	9.92	12.78
ZMAX	9498000	-6.69	2.96	0.00
ZMAX	9496630	12.00	12.00	0.00
ZMAX	9493020	20.00	20.00	0.00
ZMAX	9493060	22.50	22.50	0.00
ZMAX	9493190	19.00	19.00	0.00
ZMAX	9493140	19.98	19.98	0.00
ZMAX	9493150	19.70	19.70	0.00
ZMAX	9493240	19.00	19.00	0.00
ZMAX	9495030	17.48	17.48	0.00
ZMAX	9495010	23.20	23.20	0.00
ZMAX	9495085	15.10	15.10	0.00
ZMAX	9495140	16.00	16.00	0.00
ZMAX	9495145	16.00	16.00	0.00
ZMAX	9496320	11.00	11.00	0.00
ZMAX	9496260	14.00	14.00	0.00
ZMAX	9494250	18.00	18.00	0.00
ZMAX	9494190	18.50	18.50	0.00
ZMAX	493341	16.33	18.60	0.00
ZMAX	493481	15.51	16.34	14.28
ZMAX	494141	16.50	17.34	14.07
ZMAX	494151	15.00	17.00	0.00
ZMAX	494111	15.29	16.26	0.10
ZMAX	600000	1.00	6.38	21.70
ZMAX	600010	0.50	3.57	21.88
ZMAX	600020	0.00	2.23	21.88
ZMAX	600030	7.50	11.25	21.52
ZMAX	600040	2.00	8.81	21.60
ZMAX	600050	8.04	11.46	13.25
ZMAX	100043	99.00	99.00	0.00
ZMAX	100044	99.00	99.00	0.00
ZMAX	100045	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100047	99.00	99.00	0.00
ZMAX	100048	99.00	99.00	0.00
ZMAX	100049	99.00	99.00	0.00
ZMAX	100050	99.00	99.00	0.00
ZMAX	100051	99.00	99.00	0.00
ZMAX	100052	99.00	99.00	0.00
ZMAX	100053	99.00	99.00	0.00
ZMAX	100054	99.00	99.00	0.00
ZMAX	100055	99.00	99.00	0.00
ZMAX	100056	99.00	99.00	0.00
ZMAX	100057	99.00	99.00	0.00
ZMAX	100058	99.00	99.00	0.00
ZMAX	100059	99.00	99.00	0.00
ZMAX	100060	99.00	99.00	0.00
ZMAX	100061	99.00	99.00	0.00
ZMAX	100062	99.00	99.00	0.00
ZMAX	100063	99.00	99.00	0.00
ZMAX	100064	99.00	99.00	0.00
ZMAX	100065	99.00	99.00	0.00
ZMAX	100066	99.00	99.00	0.00
ZMAX	100067	99.00	99.00	0.00
ZMAX	100068	99.00	99.00	0.00
ZMAX	100069	99.00	99.00	0.00
ZMAX	100070	99.00	99.00	0.00
ZMAX	100071	99.00	99.00	0.00

ALTERNATIVE C1 5-YEAR 24-HOUR

ZMAX	100072	99.00	99.00	0.00
ZMAX	100073	99.00	99.00	0.00
ZMAX	100074	99.00	99.00	0.00
ZMAX	100075	99.00	99.00	0.00
ZMAX	100076	99.00	99.00	0.00
ZMAX	100077	99.00	99.00	0.00
ZMAX	100078	99.00	99.00	0.00
ZMAX	100079	99.00	99.00	0.00
ZMAX	100080	99.00	99.00	0.00
ZMAX	100081	99.00	99.00	0.00
ZMAX	100082	99.00	99.00	0.00
ZMAX	100083	99.00	99.00	0.00
ZMAX	100084	99.00	99.00	0.00
ZMAX	100085	99.00	99.00	0.00
ZMAX	100086	99.00	99.00	0.00
ZMAX	100087	99.00	99.00	0.00
ZMAX	100088	99.00	99.00	0.00
ZMAX	100089	99.00	99.00	0.00

ALTERNATIVE C1 25-YEAR 24-HOUR

	JUNC ID	INVT	Z_MAX	T_MAX
ZMAX	490000	24.23	28.37	45.23
ZMAX	490004	26.46	28.52	23.28
ZMAX	490002	20.93	28.37	45.22
ZMAX	490008	27.00	28.75	30.02
ZMAX	490010	26.16	28.77	27.03
ZMAX	490020	24.36	28.66	32.30
ZMAX	490030	26.46	28.67	26.00
ZMAX	490040	29.00	30.43	26.53
ZMAX	490050	25.16	28.78	15.58
ZMAX	490070	25.96	29.85	23.03
ZMAX	490071	29.00	30.10	14.08
ZMAX	490072	27.00	28.61	27.35
ZMAX	490073	30.00	32.38	13.73
ZMAX	490080	27.66	30.09	20.65
ZMAX	490090	28.00	31.09	17.40
ZMAX	490100	29.00	29.86	23.15
ZMAX	490110	26.16	30.42	21.98
ZMAX	490120	30.64	33.28	88.08
ZMAX	490130	28.96	33.31	88.05
ZMAX	490140	29.26	31.82	240.00
ZMAX	490141	31.00	32.77	26.40
ZMAX	490150	29.89	34.11	86.20
ZMAX	490160	29.77	35.55	76.17
ZMAX	490170	35.00	38.95	18.53
ZMAX	490180	32.66	38.72	29.67
ZMAX	490181	33.75	38.72	29.78
ZMAX	490200	36.66	38.92	14.87
ZMAX	490210	36.29	38.67	18.67
ZMAX	490211	39.00	40.68	15.37
ZMAX	490220	40.04	42.87	15.73
ZMAX	490221	42.00	45.25	24.38
ZMAX	490230	39.95	41.46	25.25
ZMAX	490240	26.36	31.08	20.87
ZMAX	490250	29.00	33.11	18.93
ZMAX	490251	33.00	35.73	29.95
ZMAX	490260	31.16	34.72	19.57
ZMAX	490261	34.00	36.25	13.68
ZMAX	490263	34.00	35.98	28.08
ZMAX	490264	33.00	35.25	19.08
ZMAX	490266	34.00	36.12	16.08
ZMAX	490270	35.00	38.99	14.97
ZMAX	490280	32.70	35.73	29.95
ZMAX	490281	32.70	35.73	29.90
ZMAX	490290	31.00	34.93	16.10
ZMAX	490300	31.86	34.84	17.57
ZMAX	490310	33.00	37.13	17.63
ZMAX	490320	34.00	37.98	16.77
ZMAX	490321	36.00	38.60	24.48
ZMAX	490330	37.00	38.74	15.72
ZMAX	490340	35.00	37.94	15.93
ZMAX	490350	36.00	38.77	15.67
ZMAX	490370	33.96	36.43	57.00
ZMAX	490375	35.00	38.61	54.25
ZMAX	490390	34.56	38.71	19.92
ZMAX	490391	36.80	38.00	21.57
ZMAX	490392	36.40	37.07	15.38
ZMAX	490400	37.00	39.01	16.07
ZMAX	490401	37.00	39.71	25.98
ZMAX	490410	35.46	38.61	54.18
ZMAX	490411	36.00	38.61	54.30
ZMAX	490420	35.00	40.76	48.58
ZMAX	490421	39.00	40.16	28.50
ZMAX	490422	39.00	41.18	16.93
ZMAX	490425	38.00	40.76	49.17
ZMAX	490430	35.47	41.32	28.23
ZMAX	490440	40.00	43.49	26.10

ALTERNATIVE C1 25-YEAR 24-HOUR

ZMAX	490450	39.00	40.86	25.57
ZMAX	490451	39.00	40.57	63.08
ZMAX	490453	39.00	40.57	63.08
ZMAX	490455	39.00	40.77	18.40
ZMAX	490460	43.00	46.56	27.58
ZMAX	490470	40.00	42.50	36.28
ZMAX	490480	39.67	42.50	36.20
ZMAX	490490	40.38	42.78	21.83
ZMAX	490500	41.00	45.04	35.87
ZMAX	490510	49.00	51.19	17.32
ZMAX	490520	43.47	49.71	24.33
ZMAX	490530	51.00	54.87	82.32
ZMAX	490535	56.47	58.48	15.63
ZMAX	490540	56.00	58.76	15.58
ZMAX	490550	48.00	49.84	16.68
ZMAX	490555	48.07	52.12	13.70
ZMAX	490560	49.00	50.03	16.08
ZMAX	490580	35.47	41.48	28.00
ZMAX	490590	48.37	49.84	25.68
ZMAX	490600	42.54	44.75	15.92
ZMAX	490610	39.77	42.47	26.28
ZMAX	490612	42.00	44.27	15.28
ZMAX	490620	41.70	43.14	15.70
ZMAX	490621	44.00	45.43	18.08
ZMAX	490630	42.17	45.13	22.68
ZMAX	490637	41.53	43.06	14.32
ZMAX	490638	44.12	44.62	24.58
ZMAX	490639	48.72	49.71	15.05
ZMAX	490640	37.57	41.57	26.95
ZMAX	490641	44.00	48.12	24.27
ZMAX	490642	45.16	48.40	16.60
ZMAX	490643	39.87	45.63	16.23
ZMAX	490644	47.67	49.63	15.20
ZMAX	490645	48.67	51.72	14.87
ZMAX	490646	41.53	47.77	14.02
ZMAX	490650	43.27	45.90	17.90
ZMAX	490651	48.16	50.96	16.93
ZMAX	490652	43.47	46.34	14.20
ZMAX	490654	46.00	48.44	17.00
ZMAX	490655	46.55	48.90	14.03
ZMAX	490659	45.57	49.12	15.45
ZMAX	490660	39.87	47.60	15.55
ZMAX	490661	45.57	50.45	15.18
ZMAX	490670	45.37	49.21	15.73
ZMAX	490675	41.87	49.03	15.62
ZMAX	490680	47.11	50.23	16.72
ZMAX	490690	45.49	49.30	15.95
ZMAX	490700	53.74	59.45	29.95
ZMAX	490710	47.96	52.70	27.10
ZMAX	490711	52.00	54.53	16.28
ZMAX	490720	50.00	52.67	27.00
ZMAX	490730	50.23	53.77	26.23
ZMAX	490740	49.64	54.17	16.68
ZMAX	490742	58.00	59.70	28.00
ZMAX	490743	48.76	54.22	17.32
ZMAX	490744	49.87	54.22	17.32
ZMAX	490745	57.00	59.70	28.00
ZMAX	490746	57.00	60.23	26.48
ZMAX	490750	51.30	54.18	17.95
ZMAX	490751	55.00	56.59	25.63
ZMAX	490760	50.95	54.43	24.75
ZMAX	490770	51.91	55.55	26.07
ZMAX	490771	55.00	56.66	25.73
ZMAX	490772	56.00	57.91	26.25
ZMAX	490773	56.00	59.07	25.82
ZMAX	490776	56.00	57.62	25.05
ZMAX	490779	55.00	57.37	16.63

ALTERNATIVE C1 25-YEAR 24-HOUR

ZMAX	490780	54.21	57.67	22.25
ZMAX	490790	53.17	55.58	28.32
ZMAX	490791	56.00	58.61	27.17
ZMAX	490792	56.00	58.35	25.97
ZMAX	490794	56.00	57.67	29.38
ZMAX	490795	56.00	57.44	27.33
ZMAX	490800	53.17	55.96	14.97
ZMAX	490801	55.00	57.44	16.42
ZMAX	490802	56.00	58.00	25.58
ZMAX	490803	57.00	58.52	27.98
ZMAX	490804	56.00	58.52	27.70
ZMAX	490900	53.67	55.58	28.42
ZMAX	491010	22.06	25.52	14.12
ZMAX	491019	26.44	27.85	18.53
ZMAX	491020	26.14	29.05	16.60
ZMAX	491021	26.00	29.05	17.78
ZMAX	491022	27.07	29.04	17.30
ZMAX	491040	23.16	25.71	14.08
ZMAX	491041	26.86	29.46	13.87
ZMAX	491042	27.66	28.87	16.80
ZMAX	491043	27.17	28.78	16.83
ZMAX	491044	27.66	29.37	13.92
ZMAX	491060	25.96	29.82	63.60
ZMAX	491080	25.66	30.05	63.60
ZMAX	491100	28.96	31.12	62.93
ZMAX	491102	29.00	31.46	13.23
ZMAX	491120	27.86	31.87	84.13
ZMAX	491121	29.25	32.32	29.87
ZMAX	491122	32.00	33.38	13.42
ZMAX	491123	32.00	33.78	17.00
ZMAX	491140	29.62	32.47	29.55
ZMAX	491160	30.66	33.39	16.55
ZMAX	491180	32.00	35.42	26.15
ZMAX	491200	34.46	37.36	15.20
ZMAX	491220	36.97	38.44	19.33
ZMAX	491221	33.05	36.58	15.85
ZMAX	491222	36.80	38.95	13.12
ZMAX	491223	34.39	36.59	15.83
ZMAX	491240	31.00	33.19	27.75
ZMAX	491260	29.00	31.91	41.52
ZMAX	491280	29.00	32.00	38.45
ZMAX	491285	30.77	39.04	14.15
ZMAX	491300	29.00	31.92	41.52
ZMAX	491302	33.00	36.56	16.10
ZMAX	491320	32.90	36.55	15.93
ZMAX	491340	29.17	32.95	42.82
ZMAX	491344	36.00	38.48	27.60
ZMAX	491342	31.36	34.15	14.47
ZMAX	491360	33.97	36.88	16.73
ZMAX	491380	31.36	35.65	16.87
ZMAX	491382	33.00	33.59	14.38
ZMAX	491384	30.00	32.34	19.10
ZMAX	491387	34.17	39.59	25.35
ZMAX	491388	34.17	41.26	23.77
ZMAX	491390	36.63	39.63	15.52
ZMAX	491391	35.17	39.68	25.27
ZMAX	491393	42.00	45.45	23.05
ZMAX	491394	36.67	40.94	15.98
ZMAX	491395	35.27	39.68	25.27
ZMAX	491396	38.00	41.23	25.05
ZMAX	491397	32.07	39.50	25.43
ZMAX	491398	42.00	44.13	19.02
ZMAX	491399	38.00	41.28	23.77
ZMAX	491400	33.27	38.16	25.80
ZMAX	491401	36.77	42.43	14.37
ZMAX	491402	32.17	39.56	25.02
ZMAX	491404	38.96	41.29	23.82

ALTERNATIVE C1 25-YEAR 24-HOUR

ZMAX	491406	36.77	40.95	15.97
ZMAX	491407	32.17	39.52	25.22
ZMAX	491392	43.00	47.53	19.02
ZMAX	491403	45.00	48.19	18.73
ZMAX	491440	38.17	39.98	20.50
ZMAX	491441	38.54	39.98	20.45
ZMAX	491460	30.71	36.68	14.35
ZMAX	491465	31.27	36.50	25.52
ZMAX	491480	33.87	36.84	13.53
ZMAX	491500	30.00	36.55	27.15
ZMAX	491501	31.17	36.54	27.22
ZMAX	491502	36.00	38.05	24.28
ZMAX	491520	38.15	41.52	13.77
ZMAX	491540	41.00	44.22	16.58
ZMAX	491541	42.00	46.58	27.38
ZMAX	491452	42.00	44.02	19.80
ZMAX	491453	37.18	40.18	13.47
ZMAX	491560	41.00	41.97	29.05
ZMAX	491561	38.00	42.12	29.67
ZMAX	491562	44.00	45.31	30.95
ZMAX	491563	39.00	42.12	29.67
ZMAX	491580	36.55	38.25	240.00
ZMAX	491600	39.73	42.59	159.15
ZMAX	491620	45.57	47.10	27.02
ZMAX	491621	48.00	50.63	27.65
ZMAX	490232	44.00	46.68	15.08
ZMAX	490431	41.00	44.60	26.55
ZMAX	490449	41.00	43.73	16.33
ZMAX	490457	39.00	40.79	18.67
ZMAX	490491	47.00	50.31	219.30
ZMAX	490492	47.00	51.03	17.72
ZMAX	490501	46.00	49.01	13.98
ZMAX	490511	48.00	50.60	28.05
ZMAX	490561	57.00	58.80	27.85
ZMAX	490581	44.00	46.11	14.50
ZMAX	490582	50.00	52.16	14.25
ZMAX	490584	50.00	52.32	25.10
ZMAX	490587	53.00	57.25	14.03
ZMAX	490701	54.00	58.71	15.35
ZMAX	490702	57.00	60.53	15.67
ZMAX	490703	53.74	55.40	14.15
ZMAX	490704	56.00	60.69	13.47
ZMAX	490713	52.00	54.37	19.92
ZMAX	490741	58.00	59.18	28.28
ZMAX	490762	56.00	59.03	25.53
ZMAX	490781	58.00	62.09	17.28
ZMAX	491274	31.22	39.06	14.17
ZMAX	491284	33.92	36.96	14.38
ZMAX	491389	39.00	40.60	20.42
ZMAX	491700	23.00	27.53	20.18
ZMAX	491701	9.70	25.35	29.83
ZMAX	491702	55.00	57.51	32.57
ZMAX	491703	25.00	27.50	15.93
ZMAX	491704	56.00	58.78	15.47
ZMAX	491705	55.80	57.51	32.57
ZMAX	491706	48.90	51.94	27.80
ZMAX	491707	45.00	46.96	30.25
ZMAX	491708	36.00	38.59	24.65
ZMAX	491709	37.00	39.24	15.80
ZMAX	491710	27.00	28.89	15.88
ZMAX	491711	24.00	26.41	25.53
ZMAX	491712	30.33	34.47	29.73
ZMAX	491713	30.00	34.07	62.47
ZMAX	491714	31.00	32.38	17.52
ZMAX	491715	40.17	42.50	36.27
ZMAX	491716	30.00	34.88	25.02
ZMAX	491717	52.00	55.24	16.38

ALTERNATIVE C1 25-YEAR 24-HOUR

ZMAX	491718	34.00	36.55	14.83
ZMAX	491719	42.00	46.66	28.32
ZMAX	491720	38.00	40.61	15.87
ZMAX	491721	38.00	40.53	25.87
ZMAX	491722	39.00	39.92	17.15
ZMAX	491723	29.00	37.81	56.38
ZMAX	491724	29.00	34.88	24.98
ZMAX	491725	33.00	34.40	16.27
ZMAX	491728	30.00	35.21	15.82
ZMAX	491729	27.00	31.35	24.37
ZMAX	491730	26.00	29.87	18.22
ZMAX	491737	38.00	38.64	15.87
ZMAX	491740	37.00	38.62	15.67
ZMAX	491745	37.00	39.14	17.67
ZMAX	491746	37.00	39.08	26.35
ZMAX	491750	44.00	46.32	27.67
ZMAX	491753	49.00	51.45	21.95
ZMAX	490574	41.77	46.00	16.02
ZMAX	491405	42.00	44.60	17.08
ZMAX	490714	52.00	54.56	16.50
ZMAX	490753	51.00	54.46	29.98
ZMAX	491224	39.00	42.78	28.87
ZMAX	491225	41.50	43.96	14.92
ZMAX	491759	39.00	40.68	22.40
ZMAX	491760	39.00	40.61	22.92
ZMAX	491764	38.00	40.38	24.43
ZMAX	491768	38.00	40.29	24.43
ZMAX	499999	35.85	40.24	24.47
ZMAX	499998	35.80	40.22	24.47
ZMAX	499997	35.00	36.00	24.45
ZMAX	491002	30.84	34.07	62.33
ZMAX	491001	28.00	34.07	61.97
ZMAX	100000	99.00	99.00	0.00
ZMAX	100001	99.00	99.00	0.00
ZMAX	100002	99.00	99.00	0.00
ZMAX	100003	99.00	99.00	0.00
ZMAX	100004	99.00	99.00	0.00
ZMAX	100005	99.00	99.00	0.00
ZMAX	100006	99.00	99.00	0.00
ZMAX	100007	99.00	99.00	0.00
ZMAX	100008	99.00	99.00	0.00
ZMAX	100009	99.00	99.00	0.00
ZMAX	100010	99.00	99.00	0.00
ZMAX	100011	99.00	99.00	0.00
ZMAX	100012	99.00	99.00	0.00
ZMAX	100013	99.00	99.00	0.00
ZMAX	100014	99.00	99.00	0.00
ZMAX	100015	99.00	99.00	0.00
ZMAX	100016	99.00	99.00	0.00
ZMAX	100017	99.00	99.00	0.00
ZMAX	100018	99.00	99.00	0.00
ZMAX	100019	99.00	99.00	0.00
ZMAX	100020	99.00	99.00	0.00
ZMAX	100021	99.00	99.00	0.00
ZMAX	100022	99.00	99.00	0.00
ZMAX	100023	99.00	99.00	0.00
ZMAX	100024	99.00	99.00	0.00
ZMAX	100025	99.00	99.00	0.00
ZMAX	100026	99.00	99.00	0.00
ZMAX	100027	99.00	99.00	0.00
ZMAX	100028	99.00	99.00	0.00
ZMAX	100029	99.00	99.00	0.00
ZMAX	100030	99.00	99.00	0.00
ZMAX	100031	99.00	99.00	0.00
ZMAX	100032	99.00	99.00	0.00
ZMAX	100033	99.00	99.00	0.00
ZMAX	100034	99.00	99.00	0.00

ALTERNATIVE C1 25-YEAR 24-HOUR

ZMAX	100035	99.00	99.00	0.00
ZMAX	100036	99.00	99.00	0.00
ZMAX	100037	99.00	99.00	0.00
ZMAX	100038	99.00	99.00	0.00
ZMAX	100039	99.00	99.00	0.00
ZMAX	100040	99.00	99.00	0.00
ZMAX	493010	17.00	23.49	25.48
ZMAX	493020	20.00	23.04	18.10
ZMAX	493030	18.00	24.47	13.05
ZMAX	493040	17.00	22.33	17.12
ZMAX	493060	21.00	21.50	13.27
ZMAX	493070	19.00	26.94	13.57
ZMAX	493090	18.00	23.45	25.08
ZMAX	493100	20.00	21.15	12.67
ZMAX	493110	18.00	20.02	12.90
ZMAX	493120	18.00	20.00	0.00
ZMAX	493130	17.00	20.16	12.70
ZMAX	493140	16.00	18.79	13.38
ZMAX	493150	16.00	19.40	13.03
ZMAX	493180	18.00	24.21	14.08
ZMAX	493185	19.00	24.19	14.08
ZMAX	493190	17.00	19.35	12.98
ZMAX	493195	17.00	20.16	13.05
ZMAX	493200	18.00	20.03	46.18
ZMAX	493210	18.00	19.27	12.98
ZMAX	493215	19.00	21.01	20.03
ZMAX	493220	16.00	19.14	13.10
ZMAX	493230	15.50	18.79	13.38
ZMAX	493240	16.00	19.33	27.43
ZMAX	493250	17.00	24.21	14.08
ZMAX	493260	21.00	24.19	13.65
ZMAX	493270	19.00	24.18	13.65
ZMAX	493280	19.00	23.09	13.00
ZMAX	493290	19.00	22.29	13.02
ZMAX	493310	17.00	23.77	45.67
ZMAX	493320	17.00	20.03	46.18
ZMAX	493330	17.00	20.00	13.30
ZMAX	493340	16.33	19.98	46.20
ZMAX	493350	15.50	17.76	13.03
ZMAX	493360	13.00	18.00	0.00
ZMAX	493370	14.61	18.28	13.85
ZMAX	493380	14.50	17.53	14.83
ZMAX	493390	14.50	18.09	13.43
ZMAX	493400	13.50	17.54	14.80
ZMAX	493410	12.50	17.53	14.82
ZMAX	493420	13.50	16.28	0.03
ZMAX	493430	12.44	15.94	0.07
ZMAX	493440	15.50	19.33	27.43
ZMAX	493450	18.00	19.15	14.38
ZMAX	493470	16.00	19.14	14.38
ZMAX	493480	15.50	19.18	14.38
ZMAX	493500	12.27	16.59	14.17
ZMAX	493505	12.27	15.47	16.03
ZMAX	493520	11.76	14.62	15.47
ZMAX	493525	11.00	14.57	15.35
ZMAX	493530	14.50	17.29	13.67
ZMAX	493535	15.00	17.29	13.67
ZMAX	493540	13.50	16.00	0.00
ZMAX	493545	9.65	14.55	15.30
ZMAX	493550	14.50	15.24	12.67
ZMAX	493555	13.50	14.88	13.63
ZMAX	494010	24.80	26.00	0.00
ZMAX	494020	22.90	25.59	12.67
ZMAX	494025	20.00	21.25	12.73
ZMAX	494030	22.00	22.74	13.00
ZMAX	494040	19.00	20.56	13.03
ZMAX	494045	18.70	20.56	13.03

ALTERNATIVE C1 25-YEAR 24-HOUR

ZMAX	494050	20.00	25.00	0.00
ZMAX	494060	25.00	26.00	0.00
ZMAX	494070	18.00	19.88	13.68
ZMAX	494072	19.00	22.07	13.53
ZMAX	494074	20.00	21.08	12.73
ZMAX	494076	19.00	21.08	12.72
ZMAX	494078	21.00	22.18	12.73
ZMAX	494080	18.00	20.17	12.83
ZMAX	494100	17.00	19.08	15.12
ZMAX	494110	15.29	18.18	14.72
ZMAX	494120	18.00	19.32	13.43
ZMAX	494130	17.00	18.59	13.85
ZMAX	494140	14.50	18.57	13.87
ZMAX	494150	15.00	18.17	14.68
ZMAX	494170	18.00	19.89	13.65
ZMAX	494180	17.00	19.64	14.57
ZMAX	494185	17.00	19.77	13.73
ZMAX	494190	17.00	18.71	13.80
ZMAX	494200	15.00	16.97	0.03
ZMAX	494205	17.00	19.05	12.60
ZMAX	494210	14.87	18.80	0.00
ZMAX	494220	15.75	18.22	0.02
ZMAX	494230	16.00	18.12	14.12
ZMAX	494240	15.71	18.39	13.38
ZMAX	494250	16.70	18.00	0.00
ZMAX	495010	20.00	23.23	12.52
ZMAX	495020	15.50	19.33	27.43
ZMAX	495030	15.50	19.33	27.43
ZMAX	495035	19.00	21.09	24.97
ZMAX	495038	17.00	18.17	12.78
ZMAX	495040	16.00	18.70	12.88
ZMAX	495045	15.00	15.88	12.68
ZMAX	495050	15.50	18.89	24.92
ZMAX	495055	15.50	16.83	12.57
ZMAX	495060	14.80	15.87	12.70
ZMAX	495065	14.50	16.26	12.57
ZMAX	495070	11.50	13.54	17.28
ZMAX	495075	11.50	13.03	20.55
ZMAX	495080	13.18	14.00	0.00
ZMAX	495085	13.00	15.04	17.12
ZMAX	495090	11.42	13.34	14.25
ZMAX	495100	15.00	17.63	14.23
ZMAX	495110	14.50	17.09	12.50
ZMAX	495120	13.00	14.23	12.92
ZMAX	495125	14.42	16.37	14.37
ZMAX	495140	14.50	16.81	26.47
ZMAX	495145	14.50	16.81	26.47
ZMAX	495150	13.00	14.24	12.92
ZMAX	495152	12.50	16.09	25.52
ZMAX	495154	12.50	16.02	19.38
ZMAX	495155	12.50	16.02	19.38
ZMAX	495156	12.50	13.50	0.00
ZMAX	495160	1.50	9.32	20.72
ZMAX	495162	13.50	15.57	25.52
ZMAX	495165	13.50	16.01	17.57
ZMAX	495170	8.00	12.34	21.15
ZMAX	495180	10.45	12.48	0.00
ZMAX	495210	12.50	14.68	25.08
ZMAX	495215	12.50	14.23	12.93
ZMAX	495230	8.82	12.33	13.10
ZMAX	495235	10.50	13.88	24.82
ZMAX	495240	8.50	10.66	13.77
ZMAX	495260	13.00	16.05	24.57
ZMAX	495270	12.50	14.22	12.93
ZMAX	495275	11.50	13.22	12.92
ZMAX	495280	10.90	11.27	12.97
ZMAX	495300	13.94	15.74	13.77

ALTERNATIVE C1 25-YEAR 24-HOUR

ZMAX	495302	13.90	15.68	13.67
ZMAX	495304	13.31	15.59	13.23
ZMAX	495306	12.73	14.39	13.97
ZMAX	495308	12.18	14.27	14.32
ZMAX	495310	11.49	13.32	13.38
ZMAX	495312	10.92	13.29	13.28
ZMAX	495314	10.43	13.07	20.53
ZMAX	495316	11.80	14.15	12.53
ZMAX	495320	9.75	13.06	20.53
ZMAX	495322	9.64	14.42	15.47
ZMAX	495324	9.44	14.18	15.60
ZMAX	495326	9.30	13.67	16.75
ZMAX	495328	9.43	13.54	17.27
ZMAX	495330	9.20	13.54	17.27
ZMAX	495332	9.02	13.54	17.22
ZMAX	495334	8.90	13.30	17.75
ZMAX	495336	8.72	13.04	20.45
ZMAX	495338	8.53	13.03	20.53
ZMAX	495340	8.40	13.02	20.53
ZMAX	495342	8.23	13.01	20.57
ZMAX	495344	8.04	12.25	21.25
ZMAX	495346	7.85	12.00	13.22
ZMAX	495348	7.66	11.88	13.37
ZMAX	495350	7.47	10.86	13.57
ZMAX	495352	7.34	10.67	13.75
ZMAX	495354	7.26	10.70	13.60
ZMAX	495356	7.19	10.63	13.80
ZMAX	496010	14.50	16.38	14.38
ZMAX	496020	14.50	18.80	0.00
ZMAX	496030	14.50	16.32	14.37
ZMAX	496060	16.60	16.77	12.83
ZMAX	496065	14.00	16.31	14.37
ZMAX	496070	14.00	16.31	14.37
ZMAX	496080	14.20	18.00	0.00
ZMAX	496090	14.00	18.00	0.00
ZMAX	496100	12.50	15.93	14.58
ZMAX	496110	11.00	15.81	14.62
ZMAX	496120	13.00	15.40	21.20
ZMAX	496125	12.00	15.39	21.13
ZMAX	496130	13.00	15.67	14.67
ZMAX	496150	14.00	15.76	14.65
ZMAX	496160	11.00	15.39	21.13
ZMAX	496170	12.00	15.80	14.63
ZMAX	496175	12.00	14.96	14.65
ZMAX	496180	11.00	13.29	14.50
ZMAX	496190	11.00	13.28	14.52
ZMAX	496200	10.50	12.09	15.37
ZMAX	496232	16.00	18.00	0.00
ZMAX	496234	14.00	16.36	0.15
ZMAX	496235	15.00	15.40	13.43
ZMAX	496240	14.28	15.82	0.03
ZMAX	496245	13.50	15.24	13.78
ZMAX	496260	13.50	15.19	13.78
ZMAX	496270	12.50	13.86	13.72
ZMAX	496280	9.50	12.34	13.98
ZMAX	496310	10.50	12.08	15.40
ZMAX	496320	10.50	12.05	15.42
ZMAX	496340	4.43	12.04	15.40
ZMAX	496350	8.50	10.59	25.02
ZMAX	496360	7.50	9.08	13.68
ZMAX	496370	6.50	8.69	18.12
ZMAX	496380	5.50	8.69	18.08
ZMAX	496390	4.41	8.77	17.95
ZMAX	496395	4.50	8.51	18.42
ZMAX	496400	6.50	8.69	18.05
ZMAX	496410	-0.65	8.51	18.42
ZMAX	496420	3.50	8.31	19.47

ALTERNATIVE C1 25-YEAR 24-HOUR

ZMAX	496430	5.50	9.18	12.98
ZMAX	496440	5.50	8.33	19.78
ZMAX	496450	3.50	8.33	19.78
ZMAX	496460	5.50	10.10	14.18
ZMAX	496470	3.00	8.33	19.78
ZMAX	496480	6.50	10.06	15.08
ZMAX	496485	7.50	11.00	16.52
ZMAX	496490	3.50	9.02	20.33
ZMAX	496500	6.50	11.00	0.00
ZMAX	496510	4.50	8.50	240.00
ZMAX	496515	4.50	8.33	19.78
ZMAX	496520	5.50	8.33	19.78
ZMAX	496530	5.50	8.33	19.80
ZMAX	496540	6.50	8.33	19.78
ZMAX	496545	4.00	8.33	19.78
ZMAX	496550	4.00	8.33	19.77
ZMAX	496560	3.00	8.33	19.77
ZMAX	496570	5.50	8.31	19.75
ZMAX	496580	7.50	11.01	13.97
ZMAX	496590	4.50	8.51	18.42
ZMAX	496600	-1.88	8.33	19.68
ZMAX	496610	4.50	8.28	19.63
ZMAX	496620	4.50	8.26	19.60
ZMAX	497010	11.00	13.93	13.30
ZMAX	497020	3.50	10.44	14.43
ZMAX	497025	8.50	11.15	12.73
ZMAX	497035	6.50	10.48	13.15
ZMAX	497045	4.50	8.01	13.30
ZMAX	497050	3.50	8.00	13.30
ZMAX	497055	3.50	7.04	21.93
ZMAX	497065	1.88	7.04	21.92
ZMAX	497070	8.50	10.07	12.88
ZMAX	497080	2.06	7.32	20.08
ZMAX	497085	6.50	10.25	14.58
ZMAX	497086	6.32	10.62	13.82
ZMAX	497088	5.89	10.43	14.43
ZMAX	497090	4.32	10.30	14.57
ZMAX	497092	3.75	9.87	14.68
ZMAX	497094	2.75	9.42	14.75
ZMAX	497096	2.30	8.71	14.83
ZMAX	497098	1.85	8.49	14.87
ZMAX	497100	-0.16	7.50	20.07
ZMAX	497102	-1.57	7.44	20.08
ZMAX	497104	-2.19	7.41	20.07
ZMAX	497105	-1.00	7.40	20.07
ZMAX	497106	-1.37	7.30	20.03
ZMAX	497107	-2.07	7.30	20.03
ZMAX	497108	-0.37	7.28	20.03
ZMAX	497109	-4.75	7.29	20.03
ZMAX	497111	-3.66	7.29	20.02
ZMAX	497112	-3.66	7.21	20.03
ZMAX	497113	-5.33	7.09	20.03
ZMAX	497110	-0.19	10.22	17.00
ZMAX	497120	1.50	7.30	20.05
ZMAX	497122	4.50	7.30	20.05
ZMAX	497124	4.00	7.30	20.05
ZMAX	497130	-0.21	8.25	18.45
ZMAX	497140	4.00	7.31	20.08
ZMAX	497150	5.40	7.29	20.03
ZMAX	497160	-1.85	8.24	19.53
ZMAX	497161	-2.25	8.00	19.67
ZMAX	497162	-2.86	7.52	19.93
ZMAX	497170	-6.19	4.25	20.08
ZMAX	500010	6.94	11.25	12.75
ZMAX	500020	8.41	10.31	14.30
ZMAX	500025	6.13	11.05	12.97
ZMAX	500030	5.77	11.04	12.97

ALTERNATIVE C1 25-YEAR 24-HOUR

ZMAX	500040	5.07	10.55	13.05
ZMAX	500050	4.00	8.91	13.03
ZMAX	500110	7.43	11.26	12.82
ZMAX	500120	6.16	10.25	14.97
ZMAX	500130	8.00	11.90	13.60
ZMAX	500140	6.39	10.32	17.12
ZMAX	500210	4.00	10.40	13.80
ZMAX	500220	6.91	11.27	12.73
ZMAX	500300	5.00	10.08	12.68
ZMAX	9498000	-6.69	2.96	0.00
ZMAX	9496630	12.00	12.00	0.00
ZMAX	9493020	20.00	20.00	0.00
ZMAX	9493060	22.50	22.50	0.00
ZMAX	9493190	19.00	19.00	0.00
ZMAX	9493140	19.98	19.98	0.00
ZMAX	9493150	19.70	19.70	0.00
ZMAX	9493240	19.00	19.00	0.00
ZMAX	9495030	17.48	17.48	0.00
ZMAX	9495010	23.20	23.20	0.00
ZMAX	9495085	15.10	15.10	0.00
ZMAX	9495140	16.00	16.00	0.00
ZMAX	9495145	16.00	16.00	0.00
ZMAX	9496320	11.00	11.00	0.00
ZMAX	9496260	14.00	14.00	0.00
ZMAX	9494250	18.00	18.00	0.00
ZMAX	9494190	18.50	18.50	0.00
ZMAX	493341	16.33	18.60	0.00
ZMAX	493481	15.51	16.59	14.17
ZMAX	494141	16.50	17.63	14.23
ZMAX	494151	15.00	17.00	0.00
ZMAX	494111	15.29	16.37	14.38
ZMAX	600000	1.00	7.13	20.78
ZMAX	600010	0.50	4.52	20.97
ZMAX	600020	0.00	2.74	20.98
ZMAX	600030	7.50	12.72	20.75
ZMAX	600040	2.00	11.83	20.75
ZMAX	600050	8.04	12.20	21.25
ZMAX	100043	99.00	99.00	0.00
ZMAX	100044	99.00	99.00	0.00
ZMAX	100045	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100047	99.00	99.00	0.00
ZMAX	100048	99.00	99.00	0.00
ZMAX	100049	99.00	99.00	0.00
ZMAX	100050	99.00	99.00	0.00
ZMAX	100051	99.00	99.00	0.00
ZMAX	100052	99.00	99.00	0.00
ZMAX	100053	99.00	99.00	0.00
ZMAX	100054	99.00	99.00	0.00
ZMAX	100055	99.00	99.00	0.00
ZMAX	100056	99.00	99.00	0.00
ZMAX	100057	99.00	99.00	0.00
ZMAX	100058	99.00	99.00	0.00
ZMAX	100059	99.00	99.00	0.00
ZMAX	100060	99.00	99.00	0.00
ZMAX	100061	99.00	99.00	0.00
ZMAX	100062	99.00	99.00	0.00
ZMAX	100063	99.00	99.00	0.00
ZMAX	100064	99.00	99.00	0.00
ZMAX	100065	99.00	99.00	0.00
ZMAX	100066	99.00	99.00	0.00
ZMAX	100067	99.00	99.00	0.00
ZMAX	100068	99.00	99.00	0.00
ZMAX	100069	99.00	99.00	0.00
ZMAX	100070	99.00	99.00	0.00
ZMAX	100071	99.00	99.00	0.00

ALTERNATIVE C1 25-YEAR 24-HOUR

ZMAX	100072	99.00	99.00	0.00
ZMAX	100073	99.00	99.00	0.00
ZMAX	100074	99.00	99.00	0.00
ZMAX	100075	99.00	99.00	0.00
ZMAX	100076	99.00	99.00	0.00
ZMAX	100077	99.00	99.00	0.00
ZMAX	100078	99.00	99.00	0.00
ZMAX	100079	99.00	99.00	0.00
ZMAX	100080	99.00	99.00	0.00
ZMAX	100081	99.00	99.00	0.00
ZMAX	100082	99.00	99.00	0.00
ZMAX	100083	99.00	99.00	0.00
ZMAX	100084	99.00	99.00	0.00
ZMAX	100085	99.00	99.00	0.00
ZMAX	100086	99.00	99.00	0.00
ZMAX	100087	99.00	99.00	0.00
ZMAX	100088	99.00	99.00	0.00
ZMAX	100089	99.00	99.00	0.00

Alternative C2

ALTERNATIVE C2 5-YEAR 24-HOUR

	JUNC ID	INVT	Z_MAX	T_MAX
ZMAX	490000	24.23	26.46	0.00
ZMAX	490004	26.46	27.84	25.85
ZMAX	490002	20.93	26.14	29.05
ZMAX	490008	27.00	28.09	29.87
ZMAX	490010	26.16	28.19	39.67
ZMAX	490020	24.36	28.20	26.73
ZMAX	490030	26.46	28.14	25.25
ZMAX	490040	29.00	29.90	26.57
ZMAX	490050	25.16	28.39	15.43
ZMAX	490070	25.96	29.13	26.62
ZMAX	490071	29.00	29.91	14.60
ZMAX	490072	27.00	28.02	27.30
ZMAX	490073	30.00	32.31	14.45
ZMAX	490080	27.66	29.13	27.27
ZMAX	490090	28.00	30.71	27.40
ZMAX	490100	29.00	29.69	14.10
ZMAX	490110	26.16	29.70	25.18
ZMAX	490120	30.64	33.01	69.38
ZMAX	490130	28.96	33.02	69.33
ZMAX	490140	29.26	31.53	240.00
ZMAX	490141	31.00	32.13	26.37
ZMAX	490150	29.89	33.27	67.15
ZMAX	490160	29.77	34.52	59.60
ZMAX	490170	35.00	38.56	26.23
ZMAX	490180	32.66	37.49	26.72
ZMAX	490181	33.75	37.49	26.82
ZMAX	490200	36.66	38.56	26.23
ZMAX	490210	36.29	38.35	0.00
ZMAX	490211	39.00	40.60	17.20
ZMAX	490220	40.04	42.02	15.35
ZMAX	490221	42.00	44.50	30.53
ZMAX	490230	39.95	40.97	25.65
ZMAX	490240	26.36	30.28	24.42
ZMAX	490250	29.00	32.36	21.48
ZMAX	490251	33.00	34.78	29.83
ZMAX	490260	31.16	33.28	16.17
ZMAX	490261	34.00	36.08	13.83
ZMAX	490263	34.00	35.25	28.05
ZMAX	490264	33.00	34.83	24.37
ZMAX	490266	34.00	35.80	16.42
ZMAX	490270	35.00	37.74	14.40
ZMAX	490280	32.70	34.78	29.83
ZMAX	490281	32.70	34.78	29.75
ZMAX	490290	31.00	34.39	16.30
ZMAX	490300	31.86	33.17	13.50
ZMAX	490310	33.00	36.26	18.32
ZMAX	490320	34.00	37.76	20.60
ZMAX	490321	36.00	38.24	37.90
ZMAX	490330	37.00	38.66	27.77
ZMAX	490340	35.00	37.83	14.20
ZMAX	490350	36.00	38.67	25.85
ZMAX	490370	33.96	35.92	25.73
ZMAX	490375	35.00	38.08	57.13
ZMAX	490390	34.56	37.97	24.93
ZMAX	490391	36.80	37.26	26.05
ZMAX	490392	36.40	36.82	15.00
ZMAX	490400	37.00	38.89	25.85
ZMAX	490401	37.00	39.37	25.98
ZMAX	490410	35.46	38.08	57.08
ZMAX	490411	36.00	38.08	57.08
ZMAX	490420	35.00	40.20	50.95
ZMAX	490421	39.00	39.74	28.53
ZMAX	490422	39.00	41.05	25.17
ZMAX	490425	38.00	40.20	51.63
ZMAX	490430	35.47	40.69	26.00
ZMAX	490440	40.00	42.84	26.75

ALTERNATIVE C2 5-YEAR 24-HOUR

ZMAX	490450	39.00	40.58	57.92
ZMAX	490451	39.00	40.14	29.65
ZMAX	490453	39.00	40.14	31.75
ZMAX	490455	39.00	40.60	21.83
ZMAX	490460	43.00	45.73	27.53
ZMAX	490470	40.00	41.74	25.50
ZMAX	490480	39.67	42.00	0.00
ZMAX	490490	40.38	42.30	19.83
ZMAX	490500	41.00	44.61	59.72
ZMAX	490510	49.00	50.73	17.83
ZMAX	490520	43.47	48.11	27.60
ZMAX	490530	51.00	54.16	83.12
ZMAX	490535	56.47	57.94	16.12
ZMAX	490540	56.00	58.17	16.05
ZMAX	490550	48.00	49.28	17.52
ZMAX	490555	48.07	51.02	13.92
ZMAX	490560	49.00	49.74	16.27
ZMAX	490580	35.47	40.81	25.98
ZMAX	490590	48.37	49.31	26.27
ZMAX	490600	42.54	44.45	25.78
ZMAX	490610	39.77	41.38	27.08
ZMAX	490612	42.00	44.20	27.75
ZMAX	490620	41.70	42.88	16.80
ZMAX	490621	44.00	45.18	27.30
ZMAX	490630	42.17	44.53	20.53
ZMAX	490637	41.53	42.43	14.78
ZMAX	490638	44.12	44.50	24.82
ZMAX	490639	48.72	49.21	14.53
ZMAX	490640	37.57	40.86	25.33
ZMAX	490641	44.00	46.73	24.48
ZMAX	490642	45.16	47.24	16.32
ZMAX	490643	39.87	44.93	16.70
ZMAX	490644	47.67	49.21	14.60
ZMAX	490645	48.67	51.27	24.60
ZMAX	490646	41.53	47.31	14.48
ZMAX	490650	43.27	45.09	19.27
ZMAX	490651	48.16	50.18	16.65
ZMAX	490652	43.47	46.22	13.98
ZMAX	490654	46.00	48.13	26.82
ZMAX	490655	46.55	48.83	14.98
ZMAX	490659	45.57	48.11	14.32
ZMAX	490660	39.87	46.11	14.37
ZMAX	490661	45.57	49.72	16.63
ZMAX	490670	45.37	48.30	14.27
ZMAX	490675	41.87	48.11	14.30
ZMAX	490680	47.11	49.55	16.67
ZMAX	490690	45.49	48.39	14.18
ZMAX	490700	53.74	58.68	29.58
ZMAX	490710	47.96	52.09	27.78
ZMAX	490711	52.00	54.43	21.28
ZMAX	490720	50.00	52.14	27.97
ZMAX	490730	50.23	52.56	25.45
ZMAX	490740	49.64	53.25	17.57
ZMAX	490742	58.00	59.32	14.05
ZMAX	490743	48.76	53.27	18.00
ZMAX	490744	49.87	53.27	18.00
ZMAX	490745	57.00	59.15	29.72
ZMAX	490746	57.00	59.23	26.50
ZMAX	490750	51.30	53.51	16.03
ZMAX	490751	55.00	56.23	25.60
ZMAX	490760	50.95	53.93	20.07
ZMAX	490770	51.91	55.20	27.10
ZMAX	490771	55.00	56.06	25.68
ZMAX	490772	56.00	57.26	26.22
ZMAX	490773	56.00	58.54	25.82
ZMAX	490776	56.00	57.12	27.18
ZMAX	490779	55.00	57.10	24.95

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ZMAX	490780	54.21	57.06	20.42
ZMAX	490790	53.17	55.16	41.82
ZMAX	490791	56.00	57.79	27.22
ZMAX	490792	56.00	57.63	26.03
ZMAX	490794	56.00	57.24	29.38
ZMAX	490795	56.00	56.98	27.40
ZMAX	490800	53.17	55.62	14.60
ZMAX	490801	55.00	57.11	25.08
ZMAX	490802	56.00	57.35	25.72
ZMAX	490803	57.00	57.89	28.22
ZMAX	490804	56.00	57.89	27.72
ZMAX	490900	53.67	55.16	41.88
ZMAX	491010	22.06	24.94	14.25
ZMAX	491019	26.44	27.43	17.70
ZMAX	491020	26.14	28.53	16.78
ZMAX	491021	26.00	28.54	17.08
ZMAX	491022	27.07	28.53	16.93
ZMAX	491040	23.16	25.04	14.20
ZMAX	491041	26.86	29.01	13.92
ZMAX	491042	27.66	28.61	16.12
ZMAX	491043	27.17	28.39	16.33
ZMAX	491044	27.66	28.94	13.97
ZMAX	491060	25.96	28.98	116.38
ZMAX	491080	25.66	29.01	116.38
ZMAX	491100	28.96	30.31	96.63
ZMAX	491102	29.00	31.08	13.28
ZMAX	491120	27.86	30.30	78.73
ZMAX	491121	29.25	32.22	42.45
ZMAX	491122	32.00	33.30	13.50
ZMAX	491123	32.00	33.51	17.65
ZMAX	491140	29.62	32.27	42.22
ZMAX	491160	30.66	32.57	17.13
ZMAX	491180	32.00	34.31	25.73
ZMAX	491200	34.46	36.56	14.65
ZMAX	491220	36.97	38.07	19.53
ZMAX	491221	33.05	36.27	14.00
ZMAX	491222	36.80	38.34	13.12
ZMAX	491223	34.39	36.28	13.98
ZMAX	491240	31.00	32.45	27.82
ZMAX	491260	29.00	31.14	86.48
ZMAX	491280	29.00	31.31	84.15
ZMAX	491285	30.77	38.29	14.47
ZMAX	491300	29.00	31.31	84.15
ZMAX	491302	33.00	36.22	18.52
ZMAX	491320	32.90	36.23	14.03
ZMAX	491340	29.17	31.70	35.60
ZMAX	491344	36.00	37.90	27.73
ZMAX	491342	31.36	34.00	14.92
ZMAX	491360	33.97	36.54	16.25
ZMAX	491380	31.36	35.21	17.23
ZMAX	491382	33.00	33.42	14.47
ZMAX	491384	30.00	32.09	26.75
ZMAX	491387	34.17	38.94	49.83
ZMAX	491388	34.17	40.79	26.65
ZMAX	491390	36.63	38.94	49.28
ZMAX	491391	35.17	38.97	49.27
ZMAX	491393	42.00	44.71	19.67
ZMAX	491394	36.67	40.02	17.42
ZMAX	491395	35.27	38.97	49.25
ZMAX	491396	38.00	40.30	27.32
ZMAX	491397	32.07	38.93	49.82
ZMAX	491398	42.00	44.02	41.60
ZMAX	491399	38.00	40.79	26.65
ZMAX	491400	33.27	35.12	13.50
ZMAX	491401	36.77	42.20	14.83
ZMAX	491402	32.17	38.94	49.30
ZMAX	491404	38.96	40.79	27.17

ALTERNATIVE C2 5-YEAR 24-HOUR

ZMAX	491406	36.77	40.02	17.37
ZMAX	491407	32.17	38.93	50.07
ZMAX	491392	43.00	47.25	27.48
ZMAX	491403	45.00	48.01	29.82
ZMAX	491440	38.17	39.66	27.67
ZMAX	491441	38.54	39.66	27.65
ZMAX	491460	30.71	35.80	24.70
ZMAX	491465	31.27	35.83	25.22
ZMAX	491480	33.87	36.50	13.55
ZMAX	491500	30.00	35.85	26.38
ZMAX	491501	31.17	35.84	26.03
ZMAX	491502	36.00	37.76	27.88
ZMAX	491520	38.15	40.01	13.38
ZMAX	491540	41.00	43.84	27.87
ZMAX	491541	42.00	45.46	27.55
ZMAX	491452	42.00	43.55	26.18
ZMAX	491453	37.18	39.41	13.48
ZMAX	491560	41.00	41.59	28.95
ZMAX	491561	38.00	41.35	29.92
ZMAX	491562	44.00	44.85	31.13
ZMAX	491563	39.00	41.35	29.92
ZMAX	491580	36.55	37.57	28.97
ZMAX	491600	39.73	41.37	240.00
ZMAX	491620	45.57	46.63	28.27
ZMAX	491621	48.00	50.20	27.60
ZMAX	490232	44.00	46.41	16.42
ZMAX	490431	41.00	44.07	26.53
ZMAX	490449	41.00	43.29	17.73
ZMAX	490457	39.00	40.61	22.20
ZMAX	490491	47.00	48.42	29.25
ZMAX	490492	47.00	50.25	29.27
ZMAX	490501	46.00	48.82	14.10
ZMAX	490511	48.00	49.65	28.08
ZMAX	490561	57.00	58.11	27.78
ZMAX	490581	44.00	45.94	15.03
ZMAX	490582	50.00	51.82	18.60
ZMAX	490584	50.00	51.51	26.03
ZMAX	490587	53.00	56.61	16.95
ZMAX	490701	54.00	58.55	20.10
ZMAX	490702	57.00	60.42	25.63
ZMAX	490703	53.74	55.00	14.12
ZMAX	490704	56.00	60.39	14.15
ZMAX	490713	52.00	53.82	29.12
ZMAX	490741	58.00	58.74	28.33
ZMAX	490762	56.00	58.18	27.28
ZMAX	490781	58.00	61.75	17.97
ZMAX	491274	31.22	38.40	14.72
ZMAX	491284	33.92	36.06	14.38
ZMAX	491389	39.00	40.35	27.20
ZMAX	491700	23.00	26.12	24.52
ZMAX	491701	9.70	24.05	37.10
ZMAX	491702	55.00	56.74	35.83
ZMAX	491703	25.00	27.31	18.43
ZMAX	491704	56.00	58.66	16.53
ZMAX	491705	55.80	56.74	35.83
ZMAX	491706	48.90	51.25	27.72
ZMAX	491707	45.00	46.40	30.12
ZMAX	491708	36.00	38.27	28.08
ZMAX	491709	37.00	39.09	16.23
ZMAX	491710	27.00	28.65	16.65
ZMAX	491711	24.00	25.42	40.30
ZMAX	491712	30.33	33.33	29.95
ZMAX	491713	30.00	33.34	30.13
ZMAX	491714	31.00	32.02	21.07
ZMAX	491715	40.17	41.74	25.38
ZMAX	491716	30.00	34.36	28.57
ZMAX	491717	52.00	55.10	26.70

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ZMAX	491718	34.00	36.29	15.75
ZMAX	491719	42.00	45.70	28.52
ZMAX	491720	38.00	40.31	16.47
ZMAX	491721	38.00	39.98	25.93
ZMAX	491722	39.00	39.57	16.95
ZMAX	491723	29.00	37.08	39.95
ZMAX	491724	29.00	34.36	28.88
ZMAX	491725	33.00	33.95	16.62
ZMAX	491728	30.00	34.61	27.77
ZMAX	491729	27.00	30.19	27.33
ZMAX	491730	26.00	29.17	22.00
ZMAX	491737	38.00	38.53	16.62
ZMAX	491740	37.00	38.49	16.32
ZMAX	491745	37.00	38.92	21.35
ZMAX	491746	37.00	38.72	28.12
ZMAX	491750	44.00	45.43	27.72
ZMAX	491753	49.00	50.77	29.85
ZMAX	490574	41.77	45.22	15.65
ZMAX	491405	42.00	44.34	28.37
ZMAX	490714	52.00	54.09	17.12
ZMAX	490753	51.00	53.78	28.50
ZMAX	491224	39.00	41.41	28.83
ZMAX	491225	41.50	43.41	14.97
ZMAX	491759	39.00	40.31	21.92
ZMAX	491760	39.00	40.27	22.13
ZMAX	491764	38.00	40.00	20.45
ZMAX	491768	38.00	39.63	22.73
ZMAX	499999	35.85	39.59	22.75
ZMAX	499998	35.80	39.58	22.72
ZMAX	499997	35.00	35.80	22.72
ZMAX	491002	30.84	33.34	30.13
ZMAX	491001	28.00	33.34	30.07
ZMAX	100000	99.00	99.00	0.00
ZMAX	100001	99.00	99.00	0.00
ZMAX	100002	99.00	99.00	0.00
ZMAX	100003	99.00	99.00	0.00
ZMAX	100004	99.00	99.00	0.00
ZMAX	100005	99.00	99.00	0.00
ZMAX	100006	99.00	99.00	0.00
ZMAX	100007	99.00	99.00	0.00
ZMAX	100008	99.00	99.00	0.00
ZMAX	100009	99.00	99.00	0.00
ZMAX	100010	99.00	99.00	0.00
ZMAX	100011	99.00	99.00	0.00
ZMAX	100012	99.00	99.00	0.00
ZMAX	100013	99.00	99.00	0.00
ZMAX	100014	99.00	99.00	0.00
ZMAX	100015	99.00	99.00	0.00
ZMAX	100016	99.00	99.00	0.00
ZMAX	100017	99.00	99.00	0.00
ZMAX	100018	99.00	99.00	0.00
ZMAX	100019	99.00	99.00	0.00
ZMAX	100020	99.00	99.00	0.00
ZMAX	100021	99.00	99.00	0.00
ZMAX	100022	99.00	99.00	0.00
ZMAX	100023	99.00	99.00	0.00
ZMAX	100024	99.00	99.00	0.00
ZMAX	100025	99.00	99.00	0.00
ZMAX	100026	99.00	99.00	0.00
ZMAX	100027	99.00	99.00	0.00
ZMAX	100028	99.00	99.00	0.00
ZMAX	100029	99.00	99.00	0.00
ZMAX	100030	99.00	99.00	0.00
ZMAX	100031	99.00	99.00	0.00
ZMAX	100032	99.00	99.00	0.00
ZMAX	100033	99.00	99.00	0.00
ZMAX	100034	99.00	99.00	0.00

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ZMAX	100035	99.00	99.00	0.00
ZMAX	100036	99.00	99.00	0.00
ZMAX	100037	99.00	99.00	0.00
ZMAX	100038	99.00	99.00	0.00
ZMAX	100039	99.00	99.00	0.00
ZMAX	100040	99.00	99.00	0.00
ZMAX	493010	17.00	22.66	25.45
ZMAX	493020	20.00	22.62	27.23
ZMAX	493030	18.00	24.41	13.30
ZMAX	493040	17.00	22.11	21.47
ZMAX	493060	21.00	21.45	13.35
ZMAX	493070	19.00	25.64	13.65
ZMAX	493090	18.00	22.29	25.08
ZMAX	493100	20.00	21.11	12.67
ZMAX	493110	18.00	19.93	12.95
ZMAX	493120	18.00	20.00	0.00
ZMAX	493130	17.00	20.08	13.00
ZMAX	493140	16.00	18.43	13.70
ZMAX	493150	16.00	19.33	13.83
ZMAX	493180	18.00	24.08	14.90
ZMAX	493185	19.00	23.23	18.43
ZMAX	493190	17.00	19.21	13.03
ZMAX	493195	17.00	20.06	13.65
ZMAX	493200	18.00	19.75	13.65
ZMAX	493210	18.00	19.18	13.03
ZMAX	493215	19.00	20.75	25.27
ZMAX	493220	16.00	18.96	13.32
ZMAX	493230	15.50	18.43	13.70
ZMAX	493240	16.00	19.06	14.82
ZMAX	493250	17.00	24.08	14.90
ZMAX	493260	21.00	24.08	14.97
ZMAX	493270	19.00	24.07	14.97
ZMAX	493280	19.00	23.06	13.03
ZMAX	493290	19.00	22.23	15.38
ZMAX	493310	17.00	21.71	29.07
ZMAX	493320	17.00	19.80	0.00
ZMAX	493330	17.00	19.80	13.28
ZMAX	493340	16.33	19.74	13.65
ZMAX	493350	15.50	17.69	13.17
ZMAX	493360	13.00	18.00	0.00
ZMAX	493370	14.61	17.75	13.97
ZMAX	493380	14.50	17.11	16.92
ZMAX	493390	14.50	17.86	13.77
ZMAX	493400	13.50	17.11	16.90
ZMAX	493410	12.50	17.11	16.90
ZMAX	493420	13.50	16.28	0.03
ZMAX	493430	12.44	15.94	0.07
ZMAX	493440	15.50	18.71	28.13
ZMAX	493450	18.00	18.98	14.05
ZMAX	493470	16.00	18.98	14.07
ZMAX	493480	15.50	19.00	14.03
ZMAX	493500	12.27	16.34	14.28
ZMAX	493505	12.27	14.79	16.15
ZMAX	493520	11.76	14.27	17.03
ZMAX	493525	11.00	14.23	17.15
ZMAX	493530	14.50	17.13	16.60
ZMAX	493535	15.00	17.13	16.60
ZMAX	493540	13.50	16.00	0.00
ZMAX	493545	9.65	14.22	17.15
ZMAX	493550	14.50	15.20	12.70
ZMAX	493555	13.50	14.81	12.50
ZMAX	494010	24.80	26.00	0.00
ZMAX	494020	22.90	25.55	12.93
ZMAX	494025	20.00	21.16	12.95
ZMAX	494030	22.00	22.69	13.00
ZMAX	494040	19.00	20.45	13.07
ZMAX	494045	18.70	20.44	13.07

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ZMAX	494050	20.00	25.00	0.00
ZMAX	494060	25.00	26.00	0.00
ZMAX	494070	18.00	19.71	13.70
ZMAX	494072	19.00	22.01	24.17
ZMAX	494074	20.00	21.05	13.12
ZMAX	494076	19.00	21.05	12.68
ZMAX	494078	21.00	22.12	12.85
ZMAX	494080	18.00	20.11	13.10
ZMAX	494100	17.00	19.06	15.18
ZMAX	494110	15.29	17.18	14.35
ZMAX	494120	18.00	19.22	13.35
ZMAX	494130	17.00	18.38	14.02
ZMAX	494140	14.50	18.37	14.03
ZMAX	494150	15.00	17.17	14.33
ZMAX	494170	18.00	19.72	13.67
ZMAX	494180	17.00	19.60	15.65
ZMAX	494185	17.00	19.56	13.80
ZMAX	494190	17.00	18.34	13.85
ZMAX	494200	15.00	16.97	0.03
ZMAX	494205	17.00	18.99	15.12
ZMAX	494210	14.87	18.80	0.00
ZMAX	494220	15.75	18.22	0.02
ZMAX	494230	16.00	18.09	0.03
ZMAX	494240	15.71	18.22	13.45
ZMAX	494250	16.70	18.00	0.00
ZMAX	495010	20.00	23.20	0.00
ZMAX	495020	15.50	18.71	28.10
ZMAX	495030	15.50	18.71	28.10
ZMAX	495035	19.00	20.34	24.98
ZMAX	495038	17.00	18.10	12.90
ZMAX	495040	16.00	18.63	12.92
ZMAX	495045	15.00	15.77	12.73
ZMAX	495050	15.50	18.34	24.92
ZMAX	495055	15.50	16.79	12.95
ZMAX	495060	14.80	15.76	12.73
ZMAX	495065	14.50	16.15	13.05
ZMAX	495070	11.50	12.84	13.27
ZMAX	495075	11.50	12.50	0.00
ZMAX	495080	13.18	14.00	0.00
ZMAX	495085	13.00	15.02	20.35
ZMAX	495090	11.42	12.99	14.20
ZMAX	495100	15.00	17.34	14.07
ZMAX	495110	14.50	17.04	12.75
ZMAX	495120	13.00	14.12	13.35
ZMAX	495125	14.42	16.08	14.73
ZMAX	495140	14.50	16.55	17.73
ZMAX	495145	14.50	16.39	240.00
ZMAX	495150	13.00	14.12	13.35
ZMAX	495152	12.50	15.08	25.55
ZMAX	495154	12.50	15.43	25.97
ZMAX	495155	12.50	15.43	25.97
ZMAX	495156	12.50	13.50	0.00
ZMAX	495160	12.50	15.34	25.58
ZMAX	495162	13.50	14.84	25.57
ZMAX	495165	13.50	15.49	25.70
ZMAX	495170	12.50	15.70	24.82
ZMAX	495180	10.45	12.48	0.00
ZMAX	495210	12.50	13.90	25.12
ZMAX	495215	12.50	14.12	13.35
ZMAX	495230	8.82	11.69	13.03
ZMAX	495235	10.50	13.33	24.80
ZMAX	495240	8.50	9.73	13.58
ZMAX	495260	13.00	15.50	23.82
ZMAX	495270	12.50	14.11	13.35
ZMAX	495275	11.50	13.10	13.50
ZMAX	495280	10.90	11.14	13.52
ZMAX	495300	13.94	15.50	15.18

ALTERNATIVE C2 5-YEAR 24-HOUR

ZMAX	495302	13.90	15.44	15.27
ZMAX	495304	13.31	15.27	13.30
ZMAX	495306	12.73	14.10	14.75
ZMAX	495308	12.18	14.02	15.60
ZMAX	495310	11.49	12.96	13.53
ZMAX	495312	10.92	12.94	13.42
ZMAX	495314	10.43	12.49	23.65
ZMAX	495316	11.80	14.11	12.53
ZMAX	495320	9.75	12.49	23.68
ZMAX	495322	9.64	13.45	17.52
ZMAX	495324	9.44	13.28	17.67
ZMAX	495326	9.30	12.87	18.60
ZMAX	495328	9.43	12.83	13.47
ZMAX	495330	9.20	12.84	13.27
ZMAX	495332	9.02	12.78	19.50
ZMAX	495334	8.90	12.62	21.42
ZMAX	495336	8.72	12.48	23.77
ZMAX	495338	8.53	12.48	23.80
ZMAX	495340	8.40	12.47	23.85
ZMAX	495342	8.23	12.47	23.97
ZMAX	495344	8.04	12.35	24.18
ZMAX	495346	7.85	12.05	24.48
ZMAX	495348	7.66	11.82	24.57
ZMAX	495350	7.47	10.46	24.63
ZMAX	495352	7.34	9.74	13.58
ZMAX	495354	7.26	9.88	13.60
ZMAX	495356	7.19	9.67	13.60
ZMAX	496010	14.50	16.24	0.12
ZMAX	496020	14.50	18.80	0.00
ZMAX	496030	14.50	16.32	0.03
ZMAX	496060	16.60	16.75	12.83
ZMAX	496065	14.00	16.28	0.10
ZMAX	496070	14.00	16.25	0.10
ZMAX	496080	14.20	18.00	0.00
ZMAX	496090	14.00	18.00	0.00
ZMAX	496100	12.50	15.91	0.07
ZMAX	496110	11.00	15.56	15.10
ZMAX	496120	13.00	15.09	14.60
ZMAX	496125	12.00	14.41	21.60
ZMAX	496130	13.00	15.47	15.17
ZMAX	496150	14.00	15.52	15.13
ZMAX	496160	11.00	14.41	21.60
ZMAX	496170	12.00	15.55	15.12
ZMAX	496175	12.00	14.89	15.15
ZMAX	496180	11.00	13.19	15.42
ZMAX	496190	11.00	13.19	15.42
ZMAX	496200	10.50	11.38	15.07
ZMAX	496232	16.00	18.00	0.00
ZMAX	496234	14.00	16.36	0.15
ZMAX	496235	15.00	15.40	0.12
ZMAX	496240	14.28	15.82	0.03
ZMAX	496245	13.50	15.16	0.13
ZMAX	496260	13.50	15.03	0.30
ZMAX	496270	12.50	13.66	0.28
ZMAX	496280	9.50	12.15	14.28
ZMAX	496310	10.50	11.37	14.30
ZMAX	496320	10.50	11.22	14.27
ZMAX	496340	4.43	10.46	15.22
ZMAX	496350	8.50	9.88	25.07
ZMAX	496360	7.50	8.97	25.27
ZMAX	496370	6.50	8.24	16.42
ZMAX	496380	5.50	8.24	16.33
ZMAX	496390	4.41	8.31	16.25
ZMAX	496395	4.50	8.09	16.47
ZMAX	496400	6.50	8.24	16.30
ZMAX	496410	-0.65	8.09	16.47
ZMAX	496420	3.50	7.13	17.78

ALTERNATIVE C2 5-YEAR 24-HOUR

ZMAX	496430	5.50	9.04	14.10
ZMAX	496440	5.50	7.82	27.10
ZMAX	496450	3.50	7.82	27.10
ZMAX	496460	5.50	9.98	26.00
ZMAX	496470	3.00	7.52	18.57
ZMAX	496480	6.50	8.35	25.10
ZMAX	496485	7.50	10.67	25.40
ZMAX	496490	3.50	8.27	24.98
ZMAX	496500	6.50	11.00	0.00
ZMAX	496510	4.50	7.41	25.10
ZMAX	496515	4.50	7.97	16.62
ZMAX	496520	5.50	7.52	18.58
ZMAX	496530	5.50	7.52	18.58
ZMAX	496540	6.50	7.52	18.58
ZMAX	496545	4.00	7.52	18.58
ZMAX	496550	4.00	7.52	18.58
ZMAX	496560	3.00	7.52	18.57
ZMAX	496570	5.50	7.52	18.58
ZMAX	496580	7.50	10.88	24.98
ZMAX	496590	4.50	8.09	16.47
ZMAX	496600	-1.88	7.51	18.50
ZMAX	496610	4.50	7.18	13.22
ZMAX	496620	4.50	7.17	13.23
ZMAX	497010	11.00	13.88	13.82
ZMAX	497020	3.50	9.94	13.95
ZMAX	497025	8.50	11.09	12.88
ZMAX	497035	6.50	10.20	13.87
ZMAX	497045	4.50	7.67	14.68
ZMAX	497050	3.50	7.66	14.70
ZMAX	497055	3.50	6.68	13.62
ZMAX	497065	1.88	5.25	14.50
ZMAX	497070	8.50	9.97	12.95
ZMAX	497080	2.06	6.03	0.00
ZMAX	497085	6.50	8.95	12.95
ZMAX	497086	6.32	9.66	13.58
ZMAX	497088	5.89	8.78	13.75
ZMAX	497090	4.32	7.75	13.47
ZMAX	497092	3.75	7.03	13.67
ZMAX	497094	2.75	6.82	13.67
ZMAX	497096	2.30	6.58	13.67
ZMAX	497098	1.85	6.36	13.67
ZMAX	497100	-0.16	6.30	13.67
ZMAX	497102	-1.57	6.26	13.67
ZMAX	497104	-2.19	6.20	13.65
ZMAX	497105	-1.00	6.18	13.65
ZMAX	497106	-1.37	4.97	18.72
ZMAX	497107	-2.07	4.95	18.70
ZMAX	497108	-0.37	4.94	18.68
ZMAX	497109	-4.75	5.03	18.72
ZMAX	497111	-3.66	4.97	18.57
ZMAX	497112	-3.66	5.14	18.65
ZMAX	497113	-5.33	5.60	18.68
ZMAX	497110	-0.19	7.08	23.17
ZMAX	497120	1.50	4.96	18.72
ZMAX	497122	4.50	5.42	13.18
ZMAX	497124	4.00	4.96	18.72
ZMAX	497130	-0.21	7.05	17.10
ZMAX	497140	4.00	6.50	0.00
ZMAX	497150	5.40	6.88	12.50
ZMAX	497160	-1.85	7.11	17.90
ZMAX	497161	-2.25	6.65	18.02
ZMAX	497162	-2.86	5.85	18.10
ZMAX	497170	-6.19	3.50	18.70
ZMAX	500010	6.94	10.77	12.72
ZMAX	500020	8.41	9.58	13.75
ZMAX	500025	6.13	9.71	12.83
ZMAX	500030	5.77	9.61	12.88

ALTERNATIVE C2 5-YEAR 24-HOUR

ZMAX	500040	5.07	9.44	12.95
ZMAX	500050	4.00	8.55	12.85
ZMAX	500110	7.43	10.42	12.70
ZMAX	500120	6.16	8.78	18.88
ZMAX	500130	8.00	10.83	13.42
ZMAX	500140	6.39	8.89	18.50
ZMAX	500210	4.00	9.58	13.92
ZMAX	500220	6.91	10.85	12.57
ZMAX	500300	5.00	9.92	12.78
ZMAX	9498000	-6.69	2.96	0.00
ZMAX	9496630	12.00	12.00	0.00
ZMAX	9493020	20.00	20.00	0.00
ZMAX	9493060	22.50	22.50	0.00
ZMAX	9493190	19.00	19.00	0.00
ZMAX	9493140	19.98	19.98	0.00
ZMAX	9493150	19.70	19.70	0.00
ZMAX	9493240	19.00	19.00	0.00
ZMAX	9495030	17.48	17.48	0.00
ZMAX	9495010	23.20	23.20	0.00
ZMAX	9495085	15.10	15.10	0.00
ZMAX	9495140	16.00	16.00	0.00
ZMAX	9495145	16.00	16.00	0.00
ZMAX	9495160	15.50	15.50	0.00
ZMAX	9496320	11.00	11.00	0.00
ZMAX	9496260	14.00	14.00	0.00
ZMAX	9494250	18.00	18.00	0.00
ZMAX	9494190	18.50	18.50	0.00
ZMAX	100043	99.00	99.00	0.00
ZMAX	100044	99.00	99.00	0.00
ZMAX	100045	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100047	99.00	99.00	0.00
ZMAX	100048	99.00	99.00	0.00
ZMAX	100049	99.00	99.00	0.00
ZMAX	100050	99.00	99.00	0.00
ZMAX	100051	99.00	99.00	0.00
ZMAX	100052	99.00	99.00	0.00
ZMAX	100053	99.00	99.00	0.00
ZMAX	100054	99.00	99.00	0.00
ZMAX	100055	99.00	99.00	0.00
ZMAX	100056	99.00	99.00	0.00
ZMAX	100057	99.00	99.00	0.00
ZMAX	100058	99.00	99.00	0.00
ZMAX	100059	99.00	99.00	0.00
ZMAX	100060	99.00	99.00	0.00
ZMAX	100061	99.00	99.00	0.00
ZMAX	100062	99.00	99.00	0.00
ZMAX	100063	99.00	99.00	0.00
ZMAX	100064	99.00	99.00	0.00
ZMAX	100065	99.00	99.00	0.00
ZMAX	100066	99.00	99.00	0.00
ZMAX	100067	99.00	99.00	0.00
ZMAX	100068	99.00	99.00	0.00
ZMAX	100069	99.00	99.00	0.00
ZMAX	100070	99.00	99.00	0.00
ZMAX	100071	99.00	99.00	0.00
ZMAX	100072	99.00	99.00	0.00
ZMAX	100073	99.00	99.00	0.00
ZMAX	100074	99.00	99.00	0.00
ZMAX	100075	99.00	99.00	0.00
ZMAX	100076	99.00	99.00	0.00
ZMAX	100077	99.00	99.00	0.00
ZMAX	100078	99.00	99.00	0.00
ZMAX	100079	99.00	99.00	0.00
ZMAX	100080	99.00	99.00	0.00
ZMAX	100081	99.00	99.00	0.00

ALTERNATIVE C2 5-YEAR 24-HOUR

ZMAX	100082	99.00	99.00	0.00
ZMAX	100083	99.00	99.00	0.00
ZMAX	100084	99.00	99.00	0.00
ZMAX	100085	99.00	99.00	0.00
ZMAX	100086	99.00	99.00	0.00
ZMAX	100087	99.00	99.00	0.00
ZMAX	100088	99.00	99.00	0.00
ZMAX	100089	99.00	99.00	0.00
ZMAX	497116	0.00	2.96	0.00
ZMAX	493341	16.33	18.60	0.00
ZMAX	493481	15.51	16.34	14.28
ZMAX	494141	16.50	17.34	14.07
ZMAX	494151	15.00	17.00	0.00
ZMAX	494111	15.29	16.26	0.10
ZMAX	9498001	-6.69	0.00	0.00

ALTERNATIVE C2 25-YEAR 24-HOUR

	JUNC ID	INVT	Z_MAX	T_MAX
ZMAX	490000	24.23	28.37	45.25
ZMAX	490004	26.46	28.52	23.28
ZMAX	490002	20.93	28.37	45.23
ZMAX	490008	27.00	28.75	30.02
ZMAX	490010	26.16	28.77	27.03
ZMAX	490020	24.36	28.66	32.30
ZMAX	490030	26.46	28.67	26.00
ZMAX	490040	29.00	30.43	26.53
ZMAX	490050	25.16	28.78	15.58
ZMAX	490070	25.96	29.85	23.03
ZMAX	490071	29.00	30.10	14.08
ZMAX	490072	27.00	28.61	27.35
ZMAX	490073	30.00	32.38	13.73
ZMAX	490080	27.66	30.09	20.65
ZMAX	490090	28.00	31.09	17.40
ZMAX	490100	29.00	29.86	23.15
ZMAX	490110	26.16	30.42	21.98
ZMAX	490120	30.64	33.28	88.07
ZMAX	490130	28.96	33.31	88.05
ZMAX	490140	29.26	31.82	240.00
ZMAX	490141	31.00	32.77	26.40
ZMAX	490150	29.89	34.11	86.20
ZMAX	490160	29.77	35.55	76.17
ZMAX	490170	35.00	38.95	18.53
ZMAX	490180	32.66	38.72	29.67
ZMAX	490181	33.75	38.72	29.78
ZMAX	490200	36.66	38.92	14.87
ZMAX	490210	36.29	38.67	18.67
ZMAX	490211	39.00	40.68	15.37
ZMAX	490220	40.04	42.87	15.73
ZMAX	490221	42.00	45.25	24.38
ZMAX	490230	39.95	41.46	25.25
ZMAX	490240	26.36	31.08	20.87
ZMAX	490250	29.00	33.11	18.93
ZMAX	490251	33.00	35.73	29.93
ZMAX	490260	31.16	34.72	19.57
ZMAX	490261	34.00	36.25	13.68
ZMAX	490263	34.00	35.98	28.08
ZMAX	490264	33.00	35.25	19.08
ZMAX	490266	34.00	36.12	16.08
ZMAX	490270	35.00	38.99	14.97
ZMAX	490280	32.70	35.73	29.93
ZMAX	490281	32.70	35.73	29.90
ZMAX	490290	31.00	34.93	16.10
ZMAX	490300	31.86	34.84	17.57
ZMAX	490310	33.00	37.13	17.63
ZMAX	490320	34.00	37.98	16.77
ZMAX	490321	36.00	38.60	24.48
ZMAX	490330	37.00	38.74	15.72
ZMAX	490340	35.00	37.94	15.93
ZMAX	490350	36.00	38.77	15.67
ZMAX	490370	33.96	36.43	57.00
ZMAX	490375	35.00	38.61	54.25
ZMAX	490390	34.56	38.71	19.92
ZMAX	490391	36.80	38.00	21.57
ZMAX	490392	36.40	37.07	15.38
ZMAX	490400	37.00	39.01	16.07
ZMAX	490401	37.00	39.71	25.98
ZMAX	490410	35.46	38.61	54.18
ZMAX	490411	36.00	38.61	54.32
ZMAX	490420	35.00	40.76	48.58
ZMAX	490421	39.00	40.16	28.50
ZMAX	490422	39.00	41.18	16.93
ZMAX	490425	38.00	40.76	49.17
ZMAX	490430	35.47	41.32	28.23
ZMAX	490440	40.00	43.49	26.10

ALTERNATIVE C2 25-YEAR 24-HOUR

ZMAX	490450	39.00	40.86	25.57
ZMAX	490451	39.00	40.57	63.08
ZMAX	490453	39.00	40.57	63.08
ZMAX	490455	39.00	40.77	18.40
ZMAX	490460	43.00	46.56	27.58
ZMAX	490470	40.00	42.50	36.32
ZMAX	490480	39.67	42.50	36.18
ZMAX	490490	40.38	42.78	21.83
ZMAX	490500	41.00	45.04	35.87
ZMAX	490510	49.00	51.19	17.32
ZMAX	490520	43.47	49.71	24.33
ZMAX	490530	51.00	54.87	82.32
ZMAX	490535	56.47	58.48	15.63
ZMAX	490540	56.00	58.76	15.58
ZMAX	490550	48.00	49.84	16.68
ZMAX	490555	48.07	52.12	13.70
ZMAX	490560	49.00	50.03	16.08
ZMAX	490580	35.47	41.48	28.00
ZMAX	490590	48.37	49.84	25.68
ZMAX	490600	42.54	44.75	15.92
ZMAX	490610	39.77	42.47	26.28
ZMAX	490612	42.00	44.27	15.28
ZMAX	490620	41.70	43.14	15.70
ZMAX	490621	44.00	45.43	18.08
ZMAX	490630	42.17	45.13	22.68
ZMAX	490637	41.53	43.06	14.32
ZMAX	490638	44.12	44.62	24.58
ZMAX	490639	48.72	49.71	15.05
ZMAX	490640	37.57	41.57	26.95
ZMAX	490641	44.00	48.12	24.27
ZMAX	490642	45.16	48.40	16.60
ZMAX	490643	39.87	45.63	16.23
ZMAX	490644	47.67	49.63	15.20
ZMAX	490645	48.67	51.72	14.87
ZMAX	490646	41.53	47.77	14.02
ZMAX	490650	43.27	45.90	17.90
ZMAX	490651	48.16	50.96	16.93
ZMAX	490652	43.47	46.34	14.20
ZMAX	490654	46.00	48.44	17.00
ZMAX	490655	46.55	48.90	14.03
ZMAX	490659	45.57	49.12	15.45
ZMAX	490660	39.87	47.60	15.55
ZMAX	490661	45.57	50.45	15.18
ZMAX	490670	45.37	49.21	15.73
ZMAX	490675	41.87	49.03	15.62
ZMAX	490680	47.11	50.23	16.72
ZMAX	490690	45.49	49.30	15.95
ZMAX	490700	53.74	59.45	29.95
ZMAX	490710	47.96	52.70	27.10
ZMAX	490711	52.00	54.53	16.28
ZMAX	490720	50.00	52.67	27.00
ZMAX	490730	50.23	53.77	26.23
ZMAX	490740	49.64	54.17	16.68
ZMAX	490742	58.00	59.70	28.00
ZMAX	490743	48.76	54.22	17.32
ZMAX	490744	49.87	54.22	17.32
ZMAX	490745	57.00	59.70	28.00
ZMAX	490746	57.00	60.23	26.48
ZMAX	490750	51.30	54.18	17.95
ZMAX	490751	55.00	56.59	25.63
ZMAX	490760	50.95	54.43	24.75
ZMAX	490770	51.91	55.55	26.07
ZMAX	490771	55.00	56.66	25.73
ZMAX	490772	56.00	57.91	26.25
ZMAX	490773	56.00	59.07	25.82
ZMAX	490776	56.00	57.62	25.05
ZMAX	490779	55.00	57.37	16.63

ALTERNATIVE C2 25-YEAR 24-HOUR

ZMAX	490780	54.21	57.67	22.25
ZMAX	490790	53.17	55.58	28.32
ZMAX	490791	56.00	58.61	27.17
ZMAX	490792	56.00	58.35	25.97
ZMAX	490794	56.00	57.67	29.38
ZMAX	490795	56.00	57.44	27.33
ZMAX	490800	53.17	55.96	14.97
ZMAX	490801	55.00	57.44	16.42
ZMAX	490802	56.00	58.00	25.58
ZMAX	490803	57.00	58.52	27.98
ZMAX	490804	56.00	58.52	27.70
ZMAX	490900	53.67	55.58	28.42
ZMAX	491010	22.06	25.52	14.12
ZMAX	491019	26.44	27.85	18.53
ZMAX	491020	26.14	29.05	16.60
ZMAX	491021	26.00	29.05	17.78
ZMAX	491022	27.07	29.04	17.30
ZMAX	491040	23.16	25.71	14.08
ZMAX	491041	26.86	29.46	13.87
ZMAX	491042	27.66	28.87	16.80
ZMAX	491043	27.17	28.78	16.83
ZMAX	491044	27.66	29.37	13.92
ZMAX	491060	25.96	29.82	63.62
ZMAX	491080	25.66	30.05	63.60
ZMAX	491100	28.96	31.12	62.93
ZMAX	491102	29.00	31.46	13.23
ZMAX	491120	27.86	31.87	84.13
ZMAX	491121	29.25	32.32	29.87
ZMAX	491122	32.00	33.38	13.42
ZMAX	491123	32.00	33.78	17.00
ZMAX	491140	29.62	32.47	29.55
ZMAX	491160	30.66	33.39	16.55
ZMAX	491180	32.00	35.42	26.15
ZMAX	491200	34.46	37.36	15.20
ZMAX	491220	36.97	38.44	19.33
ZMAX	491221	33.05	36.58	15.85
ZMAX	491222	36.80	38.95	13.12
ZMAX	491223	34.39	36.59	15.83
ZMAX	491240	31.00	33.19	27.75
ZMAX	491260	29.00	31.91	41.52
ZMAX	491280	29.00	32.00	38.45
ZMAX	491285	30.77	39.04	14.15
ZMAX	491300	29.00	31.92	41.52
ZMAX	491302	33.00	36.56	16.10
ZMAX	491320	32.90	36.55	15.93
ZMAX	491340	29.17	32.95	42.82
ZMAX	491344	36.00	38.48	27.60
ZMAX	491342	31.36	34.15	14.47
ZMAX	491360	33.97	36.88	16.73
ZMAX	491380	31.36	35.65	16.87
ZMAX	491382	33.00	33.59	14.38
ZMAX	491384	30.00	32.34	19.10
ZMAX	491387	34.17	39.59	25.33
ZMAX	491388	34.17	41.26	23.77
ZMAX	491390	36.63	39.63	15.52
ZMAX	491391	35.17	39.68	25.27
ZMAX	491393	42.00	45.45	23.05
ZMAX	491394	36.67	40.94	15.98
ZMAX	491395	35.27	39.68	25.32
ZMAX	491396	38.00	41.23	25.05
ZMAX	491397	32.07	39.50	25.43
ZMAX	491398	42.00	44.13	19.02
ZMAX	491399	38.00	41.28	23.77
ZMAX	491400	33.27	38.16	25.80
ZMAX	491401	36.77	42.43	14.37
ZMAX	491402	32.17	39.56	25.02
ZMAX	491404	38.96	41.29	23.82

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ZMAX	491406	36.77	40.95	15.97
ZMAX	491407	32.17	39.52	25.22
ZMAX	491392	43.00	47.53	19.02
ZMAX	491403	45.00	48.19	18.73
ZMAX	491440	38.17	39.98	20.50
ZMAX	491441	38.54	39.98	20.45
ZMAX	491460	30.71	36.68	14.35
ZMAX	491465	31.27	36.50	25.53
ZMAX	491480	33.87	36.84	13.53
ZMAX	491500	30.00	36.55	27.15
ZMAX	491501	31.17	36.54	27.22
ZMAX	491502	36.00	38.05	24.28
ZMAX	491520	38.15	41.52	13.77
ZMAX	491540	41.00	44.22	16.58
ZMAX	491541	42.00	46.58	27.38
ZMAX	491452	42.00	44.02	19.80
ZMAX	491453	37.18	40.18	13.47
ZMAX	491560	41.00	41.97	29.05
ZMAX	491561	38.00	42.12	29.70
ZMAX	491562	44.00	45.31	30.95
ZMAX	491563	39.00	42.12	29.67
ZMAX	491580	36.55	38.25	240.00
ZMAX	491600	39.73	42.59	159.15
ZMAX	491620	45.57	47.10	27.02
ZMAX	491621	48.00	50.63	27.65
ZMAX	490232	44.00	46.68	15.08
ZMAX	490431	41.00	44.60	26.55
ZMAX	490449	41.00	43.73	16.33
ZMAX	490457	39.00	40.79	18.67
ZMAX	490491	47.00	50.31	219.30
ZMAX	490492	47.00	51.03	17.72
ZMAX	490501	46.00	49.01	13.98
ZMAX	490511	48.00	50.60	28.05
ZMAX	490561	57.00	58.80	27.85
ZMAX	490581	44.00	46.11	14.50
ZMAX	490582	50.00	52.16	14.25
ZMAX	490584	50.00	52.32	25.10
ZMAX	490587	53.00	57.25	14.03
ZMAX	490701	54.00	58.71	15.35
ZMAX	490702	57.00	60.53	15.67
ZMAX	490703	53.74	55.40	14.15
ZMAX	490704	56.00	60.69	13.47
ZMAX	490713	52.00	54.37	19.92
ZMAX	490741	58.00	59.18	28.28
ZMAX	490762	56.00	59.03	25.53
ZMAX	490781	58.00	62.09	17.28
ZMAX	491274	31.22	39.06	14.17
ZMAX	491284	33.92	36.96	14.38
ZMAX	491389	39.00	40.60	20.42
ZMAX	491700	23.00	27.53	20.18
ZMAX	491701	9.70	25.35	29.83
ZMAX	491702	55.00	57.51	32.57
ZMAX	491703	25.00	27.50	15.93
ZMAX	491704	56.00	58.78	15.47
ZMAX	491705	55.80	57.51	32.57
ZMAX	491706	48.90	51.94	27.80
ZMAX	491707	45.00	46.96	30.25
ZMAX	491708	36.00	38.59	24.65
ZMAX	491709	37.00	39.24	15.80
ZMAX	491710	27.00	28.89	15.88
ZMAX	491711	24.00	26.41	25.53
ZMAX	491712	30.33	34.47	29.73
ZMAX	491713	30.00	34.07	61.82
ZMAX	491714	31.00	32.38	17.52
ZMAX	491715	40.17	42.50	36.28
ZMAX	491716	30.00	34.88	25.02
ZMAX	491717	52.00	55.24	16.38

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ZMAX	491718	34.00	36.55	14.83
ZMAX	491719	42.00	46.66	28.32
ZMAX	491720	38.00	40.61	15.87
ZMAX	491721	38.00	40.53	25.87
ZMAX	491722	39.00	39.92	17.15
ZMAX	491723	29.00	37.81	56.38
ZMAX	491724	29.00	34.88	24.98
ZMAX	491725	33.00	34.40	16.27
ZMAX	491728	30.00	35.21	15.82
ZMAX	491729	27.00	31.35	24.37
ZMAX	491730	26.00	29.87	18.22
ZMAX	491737	38.00	38.64	15.87
ZMAX	491740	37.00	38.62	15.67
ZMAX	491745	37.00	39.14	17.67
ZMAX	491746	37.00	39.08	26.35
ZMAX	491750	44.00	46.32	27.67
ZMAX	491753	49.00	51.45	21.95
ZMAX	490574	41.77	46.00	16.02
ZMAX	491405	42.00	44.60	17.08
ZMAX	490714	52.00	54.56	16.50
ZMAX	490753	51.00	54.46	29.98
ZMAX	491224	39.00	42.78	28.87
ZMAX	491225	41.50	43.96	14.92
ZMAX	491759	39.00	40.68	22.40
ZMAX	491760	39.00	40.61	22.92
ZMAX	491764	38.00	40.38	24.43
ZMAX	491768	38.00	40.29	24.43
ZMAX	499999	35.85	40.24	24.45
ZMAX	499998	35.80	40.22	24.43
ZMAX	499997	35.00	36.00	24.43
ZMAX	491002	30.84	34.07	61.90
ZMAX	491001	28.00	34.07	61.85
ZMAX	100000	99.00	99.00	0.00
ZMAX	100001	99.00	99.00	0.00
ZMAX	100002	99.00	99.00	0.00
ZMAX	100003	99.00	99.00	0.00
ZMAX	100004	99.00	99.00	0.00
ZMAX	100005	99.00	99.00	0.00
ZMAX	100006	99.00	99.00	0.00
ZMAX	100007	99.00	99.00	0.00
ZMAX	100008	99.00	99.00	0.00
ZMAX	100009	99.00	99.00	0.00
ZMAX	100010	99.00	99.00	0.00
ZMAX	100011	99.00	99.00	0.00
ZMAX	100012	99.00	99.00	0.00
ZMAX	100013	99.00	99.00	0.00
ZMAX	100014	99.00	99.00	0.00
ZMAX	100015	99.00	99.00	0.00
ZMAX	100016	99.00	99.00	0.00
ZMAX	100017	99.00	99.00	0.00
ZMAX	100018	99.00	99.00	0.00
ZMAX	100019	99.00	99.00	0.00
ZMAX	100020	99.00	99.00	0.00
ZMAX	100021	99.00	99.00	0.00
ZMAX	100022	99.00	99.00	0.00
ZMAX	100023	99.00	99.00	0.00
ZMAX	100024	99.00	99.00	0.00
ZMAX	100025	99.00	99.00	0.00
ZMAX	100026	99.00	99.00	0.00
ZMAX	100027	99.00	99.00	0.00
ZMAX	100028	99.00	99.00	0.00
ZMAX	100029	99.00	99.00	0.00
ZMAX	100030	99.00	99.00	0.00
ZMAX	100031	99.00	99.00	0.00
ZMAX	100032	99.00	99.00	0.00
ZMAX	100033	99.00	99.00	0.00
ZMAX	100034	99.00	99.00	0.00

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ZMAX	100035	99.00	99.00	0.00
ZMAX	100036	99.00	99.00	0.00
ZMAX	100037	99.00	99.00	0.00
ZMAX	100038	99.00	99.00	0.00
ZMAX	100039	99.00	99.00	0.00
ZMAX	100040	99.00	99.00	0.00
ZMAX	493010	17.00	23.49	25.48
ZMAX	493020	20.00	23.04	18.10
ZMAX	493030	18.00	24.47	13.05
ZMAX	493040	17.00	22.33	17.12
ZMAX	493060	21.00	21.50	13.27
ZMAX	493070	19.00	26.94	13.57
ZMAX	493090	18.00	23.45	25.08
ZMAX	493100	20.00	21.15	12.67
ZMAX	493110	18.00	20.02	12.90
ZMAX	493120	18.00	20.00	0.00
ZMAX	493130	17.00	20.16	12.70
ZMAX	493140	16.00	18.79	13.38
ZMAX	493150	16.00	19.40	13.03
ZMAX	493180	18.00	24.21	14.08
ZMAX	493185	19.00	24.19	14.08
ZMAX	493190	17.00	19.35	12.98
ZMAX	493195	17.00	20.16	13.05
ZMAX	493200	18.00	20.03	46.20
ZMAX	493210	18.00	19.27	12.98
ZMAX	493215	19.00	21.01	20.03
ZMAX	493220	16.00	19.14	13.10
ZMAX	493230	15.50	18.79	13.38
ZMAX	493240	16.00	19.33	27.43
ZMAX	493250	17.00	24.21	14.08
ZMAX	493260	21.00	24.19	13.65
ZMAX	493270	19.00	24.18	13.65
ZMAX	493280	19.00	23.09	13.00
ZMAX	493290	19.00	22.29	13.02
ZMAX	493310	17.00	23.77	45.67
ZMAX	493320	17.00	20.03	46.18
ZMAX	493330	17.00	20.00	13.30
ZMAX	493340	16.33	19.98	46.22
ZMAX	493350	15.50	17.76	13.03
ZMAX	493360	13.00	18.00	0.00
ZMAX	493370	14.61	18.28	13.85
ZMAX	493380	14.50	17.53	14.83
ZMAX	493390	14.50	18.09	13.43
ZMAX	493400	13.50	17.54	14.80
ZMAX	493410	12.50	17.53	14.82
ZMAX	493420	13.50	16.28	0.03
ZMAX	493430	12.44	15.94	0.07
ZMAX	493440	15.50	19.33	27.43
ZMAX	493450	18.00	19.15	14.38
ZMAX	493470	16.00	19.14	14.38
ZMAX	493480	15.50	19.18	14.38
ZMAX	493500	12.27	16.59	14.17
ZMAX	493505	12.27	15.47	16.03
ZMAX	493520	11.76	14.62	15.47
ZMAX	493525	11.00	14.57	15.35
ZMAX	493530	14.50	17.29	13.67
ZMAX	493535	15.00	17.29	13.67
ZMAX	493540	13.50	16.00	0.00
ZMAX	493545	9.65	14.55	15.30
ZMAX	493550	14.50	15.24	12.67
ZMAX	493555	13.50	14.88	13.63
ZMAX	494010	24.80	26.00	0.00
ZMAX	494020	22.90	25.59	12.67
ZMAX	494025	20.00	21.25	12.73
ZMAX	494030	22.00	22.74	13.00
ZMAX	494040	19.00	20.56	13.03
ZMAX	494045	18.70	20.56	13.03

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ZMAX	494050	20.00	25.00	0.00
ZMAX	494060	25.00	26.00	0.00
ZMAX	494070	18.00	19.88	13.68
ZMAX	494072	19.00	22.07	13.53
ZMAX	494074	20.00	21.08	12.73
ZMAX	494076	19.00	21.08	12.72
ZMAX	494078	21.00	22.18	12.73
ZMAX	494080	18.00	20.17	12.83
ZMAX	494100	17.00	19.08	15.12
ZMAX	494110	15.29	18.18	14.72
ZMAX	494120	18.00	19.32	13.43
ZMAX	494130	17.00	18.59	13.85
ZMAX	494140	14.50	18.57	13.87
ZMAX	494150	15.00	18.17	14.68
ZMAX	494170	18.00	19.89	13.65
ZMAX	494180	17.00	19.64	14.57
ZMAX	494185	17.00	19.77	13.73
ZMAX	494190	17.00	18.71	13.80
ZMAX	494200	15.00	16.97	0.03
ZMAX	494205	17.00	19.05	12.60
ZMAX	494210	14.87	18.80	0.00
ZMAX	494220	15.75	18.22	0.02
ZMAX	494230	16.00	18.12	14.12
ZMAX	494240	15.71	18.39	13.38
ZMAX	494250	16.70	18.00	0.00
ZMAX	495010	20.00	23.23	12.52
ZMAX	495020	15.50	19.33	27.43
ZMAX	495030	15.50	19.33	27.43
ZMAX	495035	19.00	21.09	24.97
ZMAX	495038	17.00	18.17	12.78
ZMAX	495040	16.00	18.70	12.88
ZMAX	495045	15.00	15.88	12.68
ZMAX	495050	15.50	18.89	24.92
ZMAX	495055	15.50	16.83	12.57
ZMAX	495060	14.80	15.87	12.70
ZMAX	495065	14.50	16.26	12.57
ZMAX	495070	11.50	13.58	17.40
ZMAX	495075	11.50	13.22	20.93
ZMAX	495080	13.18	14.00	0.00
ZMAX	495085	13.00	15.04	17.12
ZMAX	495090	11.42	13.34	14.25
ZMAX	495100	15.00	17.63	14.23
ZMAX	495110	14.50	17.09	12.50
ZMAX	495120	13.00	14.23	12.92
ZMAX	495125	14.42	16.37	14.37
ZMAX	495140	14.50	16.81	26.47
ZMAX	495145	14.50	16.81	26.47
ZMAX	495150	13.00	14.24	12.92
ZMAX	495152	12.50	16.09	25.52
ZMAX	495154	12.50	16.02	19.38
ZMAX	495155	12.50	16.02	19.38
ZMAX	495156	12.50	13.50	0.00
ZMAX	495160	12.50	16.03	24.87
ZMAX	495162	13.50	15.57	25.52
ZMAX	495165	13.50	16.01	17.57
ZMAX	495170	12.50	15.75	13.55
ZMAX	495180	10.45	12.60	22.02
ZMAX	495210	12.50	14.68	25.08
ZMAX	495215	12.50	14.23	12.93
ZMAX	495230	8.82	12.33	13.10
ZMAX	495235	10.50	13.88	24.82
ZMAX	495240	8.50	10.76	23.17
ZMAX	495260	13.00	16.05	24.57
ZMAX	495270	12.50	14.22	12.93
ZMAX	495275	11.50	13.22	12.92
ZMAX	495280	10.90	11.27	12.97
ZMAX	495300	13.94	15.74	13.77

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ZMAX	495302	13.90	15.68	13.67
ZMAX	495304	13.31	15.59	13.23
ZMAX	495306	12.73	14.39	13.97
ZMAX	495308	12.18	14.27	14.32
ZMAX	495310	11.49	13.32	13.38
ZMAX	495312	10.92	13.29	13.28
ZMAX	495314	10.43	13.24	20.82
ZMAX	495316	11.80	14.15	12.53
ZMAX	495320	9.75	13.24	20.82
ZMAX	495322	9.64	14.42	15.47
ZMAX	495324	9.44	14.18	15.62
ZMAX	495326	9.30	13.68	16.85
ZMAX	495328	9.43	13.57	17.40
ZMAX	495330	9.20	13.57	17.40
ZMAX	495332	9.02	13.57	17.35
ZMAX	495334	8.90	13.37	18.22
ZMAX	495336	8.72	13.22	20.85
ZMAX	495338	8.53	13.22	20.93
ZMAX	495340	8.40	13.21	20.95
ZMAX	495342	8.23	13.20	20.97
ZMAX	495344	8.04	13.06	21.35
ZMAX	495346	7.85	12.91	21.63
ZMAX	495348	7.66	12.60	22.02
ZMAX	495350	7.47	11.22	22.82
ZMAX	495352	7.34	10.77	23.17
ZMAX	495354	7.26	10.77	23.17
ZMAX	495356	7.19	10.71	23.17
ZMAX	496010	14.50	16.38	14.38
ZMAX	496020	14.50	18.80	0.00
ZMAX	496030	14.50	16.32	14.37
ZMAX	496060	16.60	16.77	12.83
ZMAX	496065	14.00	16.31	14.37
ZMAX	496070	14.00	16.31	14.37
ZMAX	496080	14.20	18.00	0.00
ZMAX	496090	14.00	18.00	0.00
ZMAX	496100	12.50	15.93	14.58
ZMAX	496110	11.00	15.81	14.62
ZMAX	496120	13.00	15.40	21.20
ZMAX	496125	12.00	15.39	21.13
ZMAX	496130	13.00	15.67	14.67
ZMAX	496150	14.00	15.76	14.65
ZMAX	496160	11.00	15.39	21.13
ZMAX	496170	12.00	15.80	14.63
ZMAX	496175	12.00	14.96	14.65
ZMAX	496180	11.00	13.29	14.50
ZMAX	496190	11.00	13.28	14.52
ZMAX	496200	10.50	12.09	15.37
ZMAX	496232	16.00	18.00	0.00
ZMAX	496234	14.00	16.36	0.15
ZMAX	496235	15.00	15.40	13.43
ZMAX	496240	14.28	15.82	0.03
ZMAX	496245	13.50	15.24	13.78
ZMAX	496260	13.50	15.19	13.78
ZMAX	496270	12.50	13.86	13.72
ZMAX	496280	9.50	12.34	13.98
ZMAX	496310	10.50	12.08	15.40
ZMAX	496320	10.50	12.05	15.42
ZMAX	496340	4.43	12.04	15.40
ZMAX	496350	8.50	10.59	25.02
ZMAX	496360	7.50	9.08	13.68
ZMAX	496370	6.50	8.71	18.18
ZMAX	496380	5.50	8.70	18.13
ZMAX	496390	4.41	8.78	18.00
ZMAX	496395	4.50	8.52	18.53
ZMAX	496400	6.50	8.70	18.12
ZMAX	496410	-0.65	8.52	18.53
ZMAX	496420	3.50	8.37	19.53

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ZMAX	496430	5.50	9.18	12.98
ZMAX	496440	5.50	8.38	19.87
ZMAX	496450	3.50	8.37	19.87
ZMAX	496460	5.50	10.10	14.18
ZMAX	496470	3.00	8.37	19.87
ZMAX	496480	6.50	10.06	15.08
ZMAX	496485	7.50	11.00	16.52
ZMAX	496490	3.50	9.02	20.33
ZMAX	496500	6.50	11.00	0.00
ZMAX	496510	4.50	8.50	240.00
ZMAX	496515	4.50	8.37	19.87
ZMAX	496520	5.50	8.37	19.85
ZMAX	496530	5.50	8.37	19.88
ZMAX	496540	6.50	8.37	19.87
ZMAX	496545	4.00	8.37	19.87
ZMAX	496550	4.00	8.37	19.85
ZMAX	496560	3.00	8.37	19.85
ZMAX	496570	5.50	8.36	19.83
ZMAX	496580	7.50	11.01	13.97
ZMAX	496590	4.50	8.52	18.53
ZMAX	496600	-1.88	8.38	19.77
ZMAX	496610	4.50	8.33	19.73
ZMAX	496620	4.50	8.32	19.70
ZMAX	497010	11.00	13.93	13.30
ZMAX	497020	3.50	10.10	13.15
ZMAX	497025	8.50	11.15	12.73
ZMAX	497035	6.50	10.48	13.15
ZMAX	497045	4.50	8.04	13.60
ZMAX	497050	3.50	8.04	20.77
ZMAX	497055	3.50	7.46	21.43
ZMAX	497065	1.88	7.46	21.43
ZMAX	497070	8.50	10.07	12.88
ZMAX	497080	2.06	7.58	20.28
ZMAX	497085	6.50	9.15	13.62
ZMAX	497086	6.32	10.71	23.17
ZMAX	497088	5.89	9.95	13.55
ZMAX	497090	4.32	9.14	13.62
ZMAX	497092	3.75	8.64	13.63
ZMAX	497094	2.75	8.50	13.63
ZMAX	497096	2.30	8.31	13.63
ZMAX	497098	1.85	8.13	20.85
ZMAX	497100	-0.16	8.03	20.75
ZMAX	497102	-1.57	7.96	20.67
ZMAX	497104	-2.19	7.85	20.53
ZMAX	497105	-1.00	7.83	20.52
ZMAX	497106	-1.37	7.56	20.23
ZMAX	497107	-2.07	7.55	20.22
ZMAX	497108	-0.37	7.52	20.20
ZMAX	497109	-4.75	7.55	20.22
ZMAX	497111	-3.66	7.54	20.20
ZMAX	497112	-3.66	7.46	20.22
ZMAX	497113	-5.33	7.34	20.22
ZMAX	497110	-0.19	10.22	17.00
ZMAX	497120	1.50	7.55	20.23
ZMAX	497122	4.50	7.55	20.23
ZMAX	497124	4.00	7.55	20.23
ZMAX	497130	-0.21	8.28	19.05
ZMAX	497140	4.00	7.57	20.28
ZMAX	497150	5.40	7.55	20.22
ZMAX	497160	-1.85	8.30	19.65
ZMAX	497161	-2.25	8.10	19.80
ZMAX	497162	-2.86	7.71	20.10
ZMAX	497170	-6.19	4.36	20.27
ZMAX	500010	6.94	11.25	12.75
ZMAX	500020	8.41	10.31	14.20
ZMAX	500025	6.13	11.05	12.95
ZMAX	500030	5.77	11.03	12.97

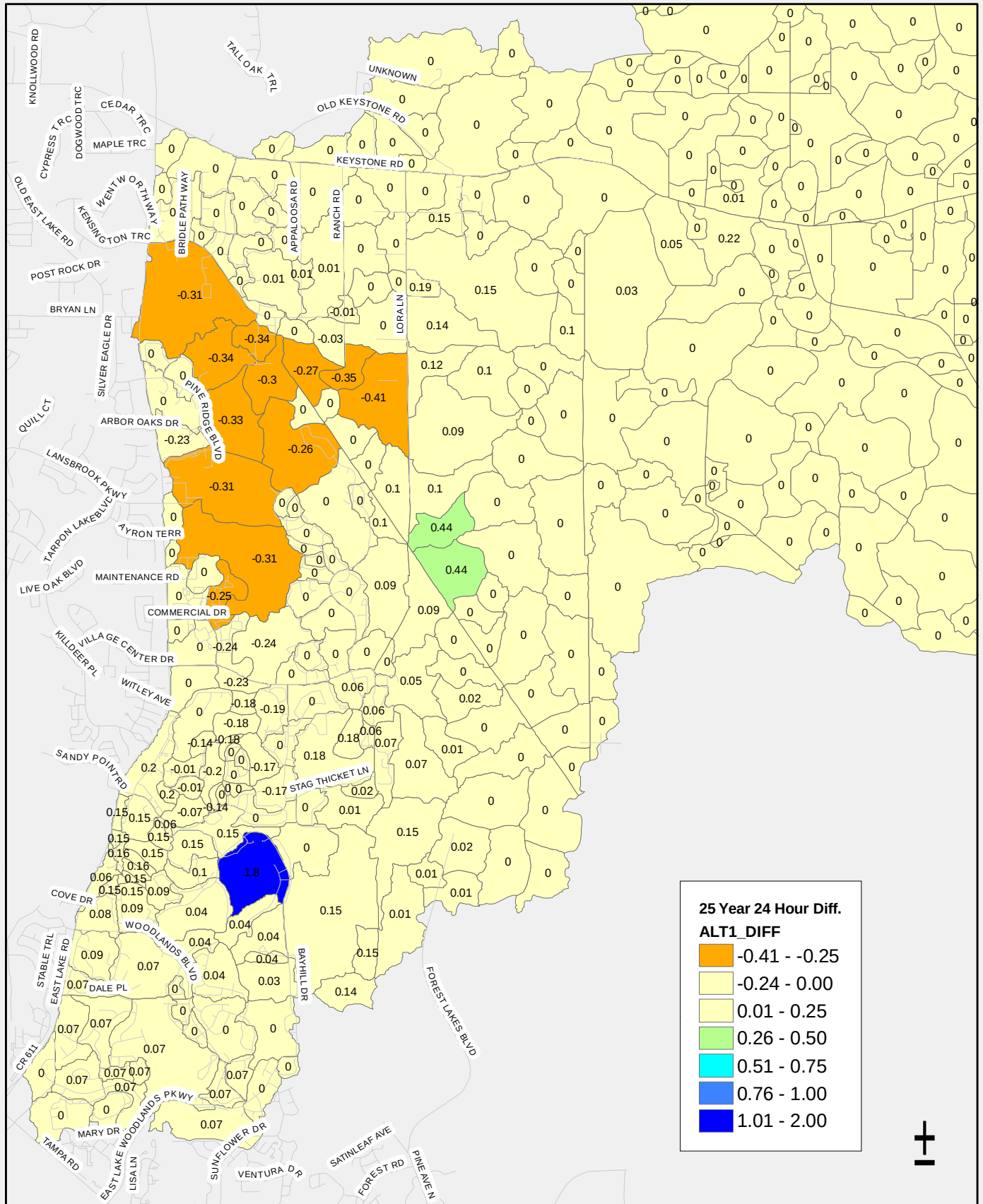
ALTERNATIVE C2 25-YEAR 24-HOUR

ZMAX	500040	5.07	10.55	13.03
ZMAX	500050	4.00	8.91	13.03
ZMAX	500110	7.43	11.21	12.80
ZMAX	500120	6.16	9.40	16.62
ZMAX	500130	8.00	11.89	13.52
ZMAX	500140	6.39	9.77	16.87
ZMAX	500210	4.00	10.39	13.78
ZMAX	500220	6.91	11.27	12.73
ZMAX	500300	5.00	10.08	12.68
ZMAX	9498000	-6.69	2.96	0.00
ZMAX	9496630	12.00	12.00	0.00
ZMAX	9493020	20.00	20.00	0.00
ZMAX	9493060	22.50	22.50	0.00
ZMAX	9493190	19.00	19.00	0.00
ZMAX	9493140	19.98	19.98	0.00
ZMAX	9493150	19.70	19.70	0.00
ZMAX	9493240	19.00	19.00	0.00
ZMAX	9495030	17.48	17.48	0.00
ZMAX	9495010	23.20	23.20	0.00
ZMAX	9495085	15.10	15.10	0.00
ZMAX	9495140	16.00	16.00	0.00
ZMAX	9495145	16.00	16.00	0.00
ZMAX	9495160	15.50	15.50	0.00
ZMAX	9496320	11.00	11.00	0.00
ZMAX	9496260	14.00	14.00	0.00
ZMAX	9494250	18.00	18.00	0.00
ZMAX	9494190	18.50	18.50	0.00
ZMAX	100043	99.00	99.00	0.00
ZMAX	100044	99.00	99.00	0.00
ZMAX	100045	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100046	99.00	99.00	0.00
ZMAX	100047	99.00	99.00	0.00
ZMAX	100048	99.00	99.00	0.00
ZMAX	100049	99.00	99.00	0.00
ZMAX	100050	99.00	99.00	0.00
ZMAX	100051	99.00	99.00	0.00
ZMAX	100052	99.00	99.00	0.00
ZMAX	100053	99.00	99.00	0.00
ZMAX	100054	99.00	99.00	0.00
ZMAX	100055	99.00	99.00	0.00
ZMAX	100056	99.00	99.00	0.00
ZMAX	100057	99.00	99.00	0.00
ZMAX	100058	99.00	99.00	0.00
ZMAX	100059	99.00	99.00	0.00
ZMAX	100060	99.00	99.00	0.00
ZMAX	100061	99.00	99.00	0.00
ZMAX	100062	99.00	99.00	0.00
ZMAX	100063	99.00	99.00	0.00
ZMAX	100064	99.00	99.00	0.00
ZMAX	100065	99.00	99.00	0.00
ZMAX	100066	99.00	99.00	0.00
ZMAX	100067	99.00	99.00	0.00
ZMAX	100068	99.00	99.00	0.00
ZMAX	100069	99.00	99.00	0.00
ZMAX	100070	99.00	99.00	0.00
ZMAX	100071	99.00	99.00	0.00
ZMAX	100072	99.00	99.00	0.00
ZMAX	100073	99.00	99.00	0.00
ZMAX	100074	99.00	99.00	0.00
ZMAX	100075	99.00	99.00	0.00
ZMAX	100076	99.00	99.00	0.00
ZMAX	100077	99.00	99.00	0.00
ZMAX	100078	99.00	99.00	0.00
ZMAX	100079	99.00	99.00	0.00
ZMAX	100080	99.00	99.00	0.00
ZMAX	100081	99.00	99.00	0.00

ALTERNATIVE C2 25-YEAR 24-HOUR

ZMAX	100082	99.00	99.00	0.00
ZMAX	100083	99.00	99.00	0.00
ZMAX	100084	99.00	99.00	0.00
ZMAX	100085	99.00	99.00	0.00
ZMAX	100086	99.00	99.00	0.00
ZMAX	100087	99.00	99.00	0.00
ZMAX	100088	99.00	99.00	0.00
ZMAX	100089	99.00	99.00	0.00
ZMAX	497116	0.00	7.56	20.23
ZMAX	493341	16.33	18.60	0.00
ZMAX	493481	15.51	16.59	14.17
ZMAX	494141	16.50	17.63	14.23
ZMAX	494151	15.00	17.00	0.00
ZMAX	494111	15.29	16.37	14.38
ZMAX	9498001	-6.69	0.00	0.00

APPENDIX C



Pinellas_roads

Roads CLASS

- Interstate
- Major Roads
- Minor Roads



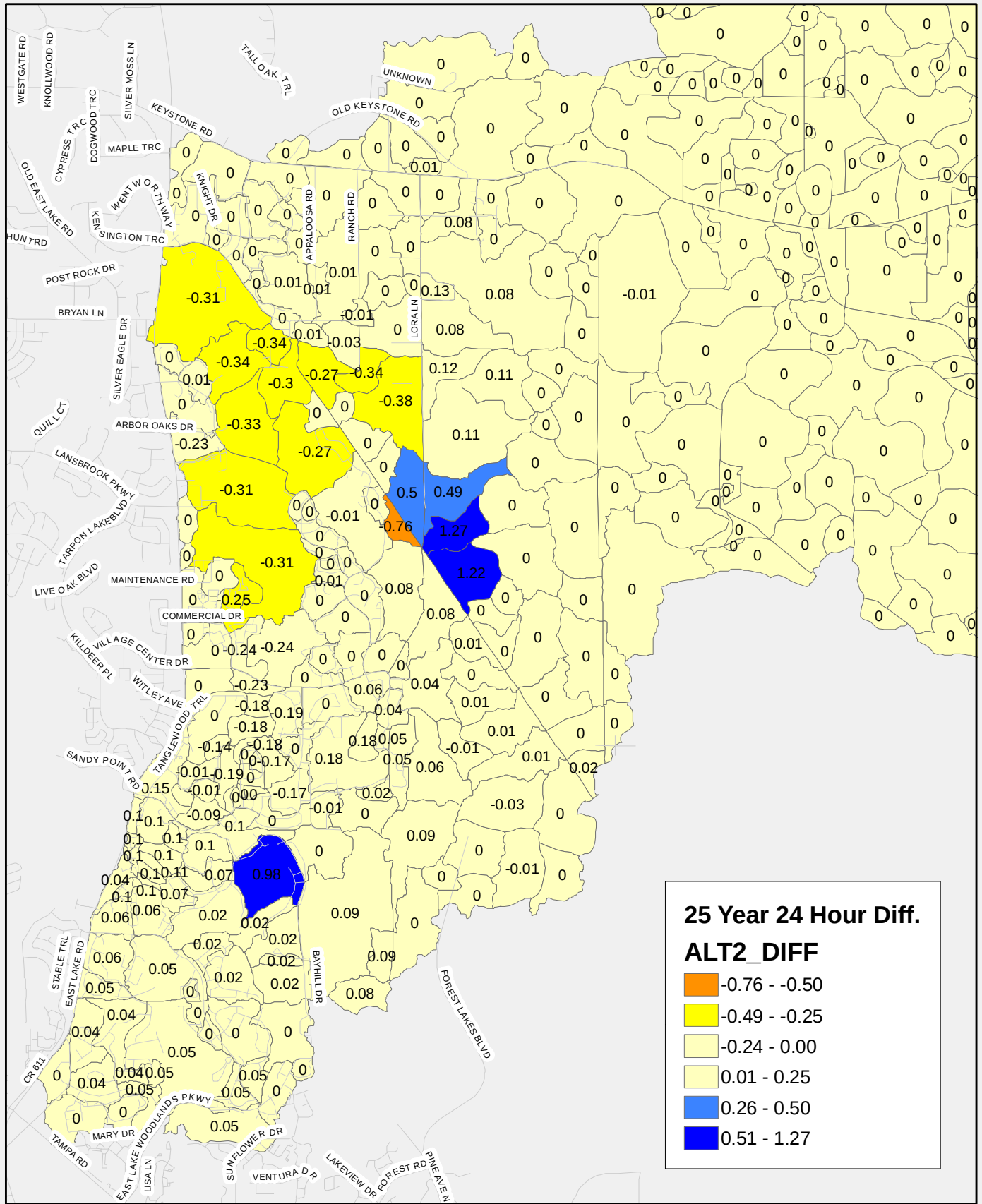
**Brooker Creek Watershed
25 Year - Alternative 1**



2

0 2,500 5,000
Feet

URS



Pinellas_roads

Roads CLASS

- Interstate
- Major Roads
- Minor Roads



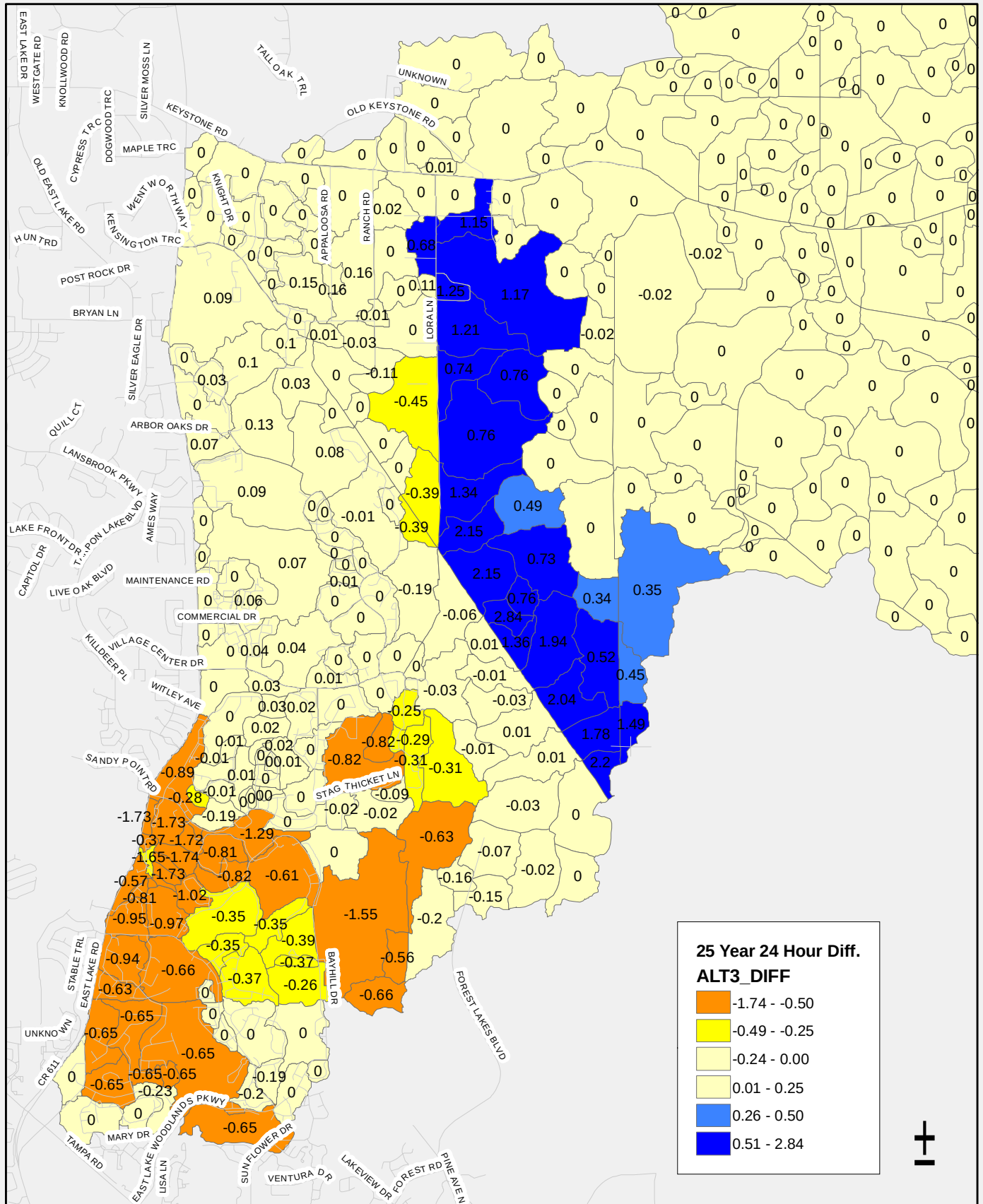
Brooker Creek Watershed
25 Year - Alternative 2



2

0 2,500 5,000
Feet

URS



Pinellas_roads

Roads CLASS

- Interstate
- Major Roads
- Minor Roads



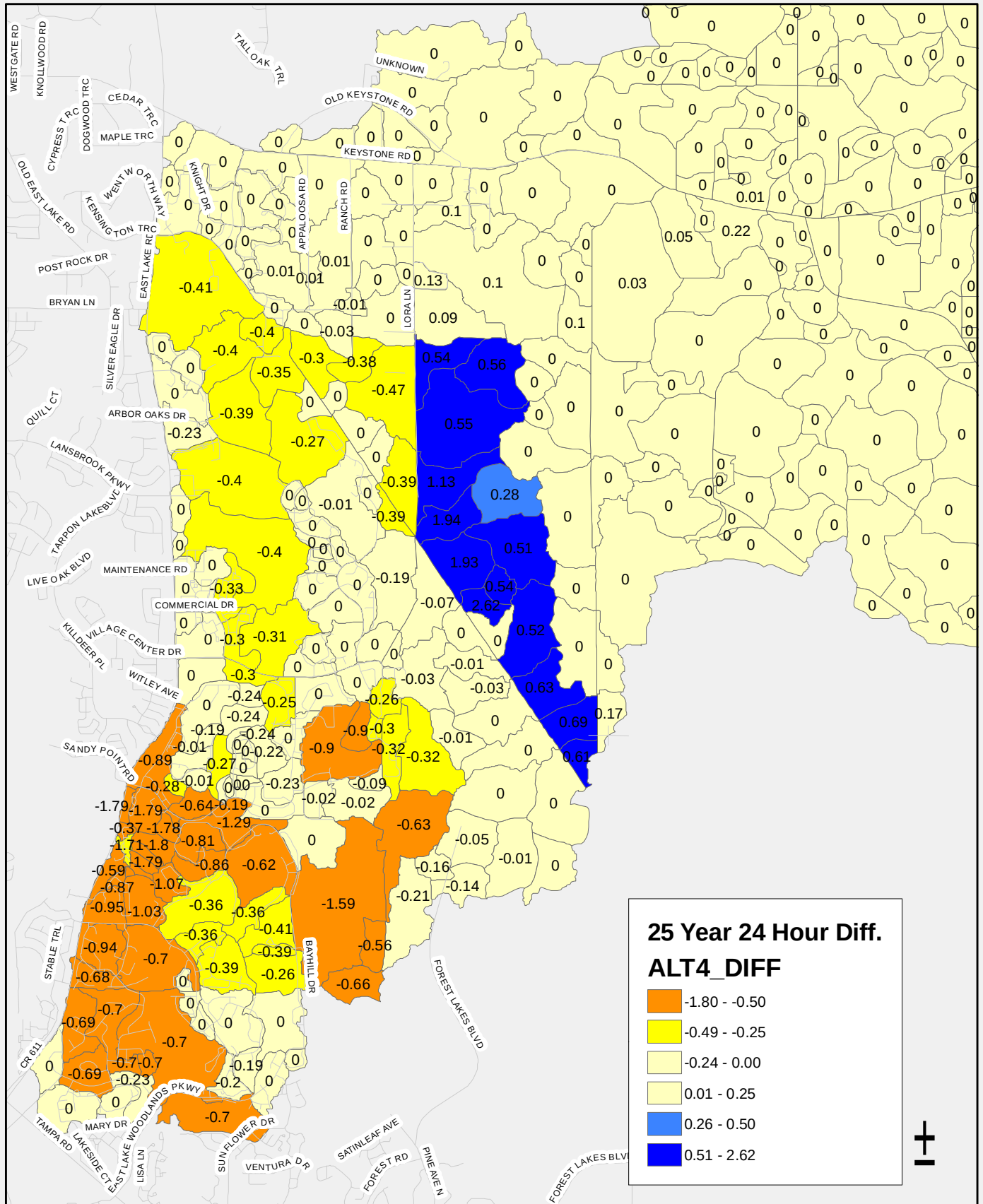
Brooker Creek Watershed
25 Year - Alternative 3



2

0 2,500 5,000
 Feet

URS



Pinellas_roads

**Roads
CLASS**

- Interstate
- Major Roads
- Minor Roads



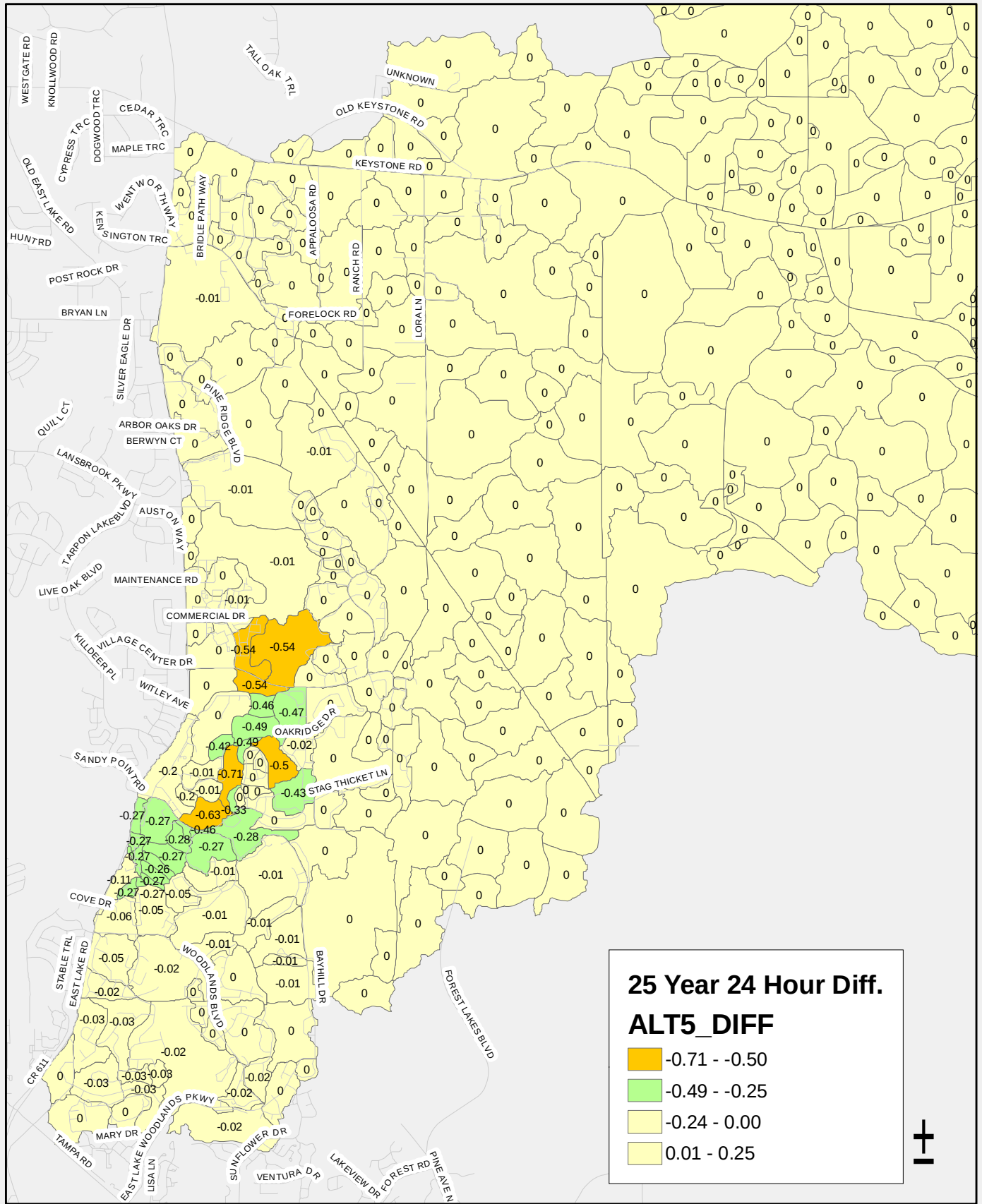
**Brooker Creek Watershed
25 Year - Alternative 4**



2

0 2,500 5,000
Feet

URS



Pinellas_roads

**Roads
CLASS**

- Interstate
- Major Roads
- Minor Roads



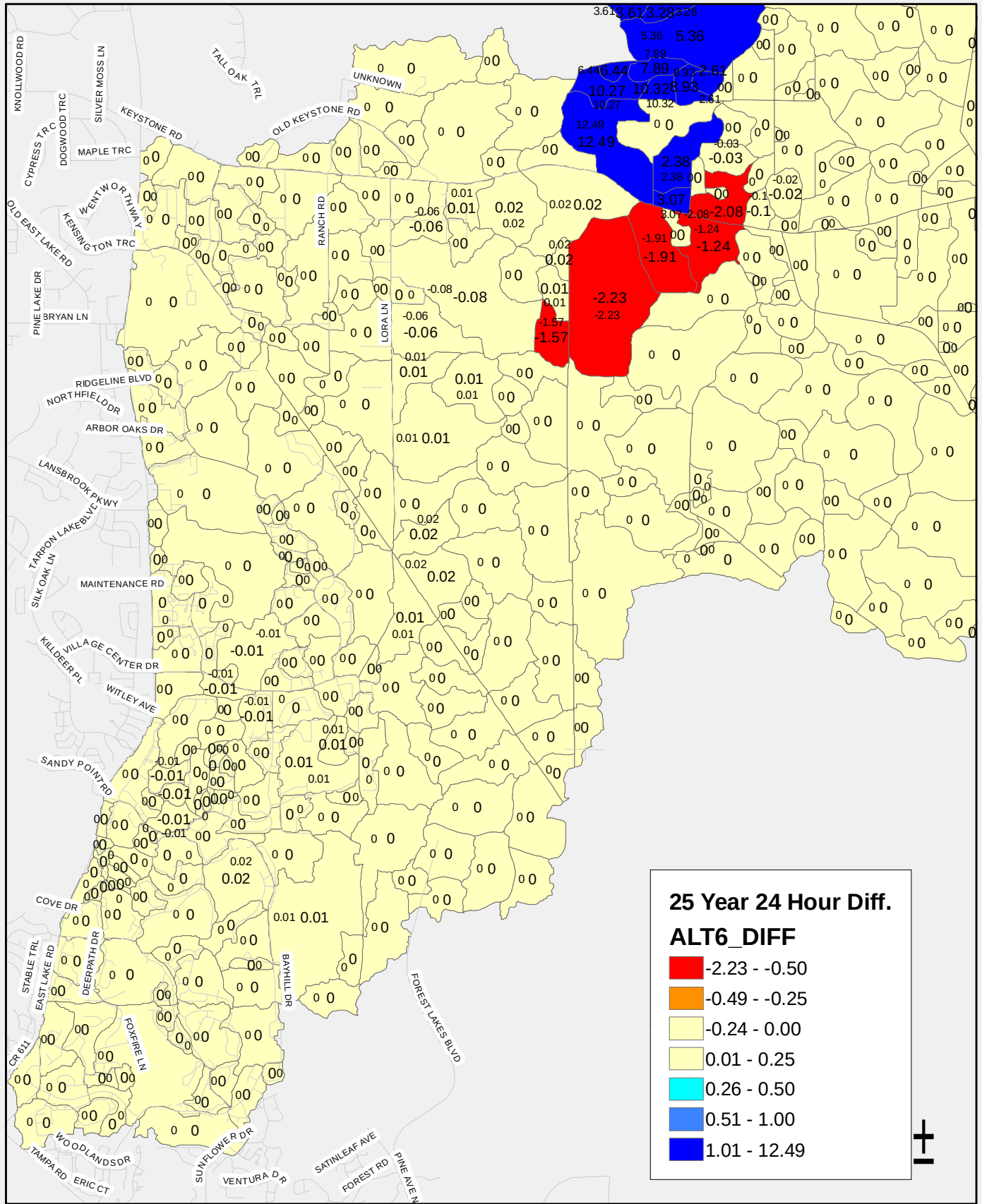
**Brooker Creek Watershed
25 Year - Alternative 5**



2

0 2,500 5,000
Feet

URS



Pinellas_roads

Roads CLASS

- Interstate
- Major Roads
- Minor Roads



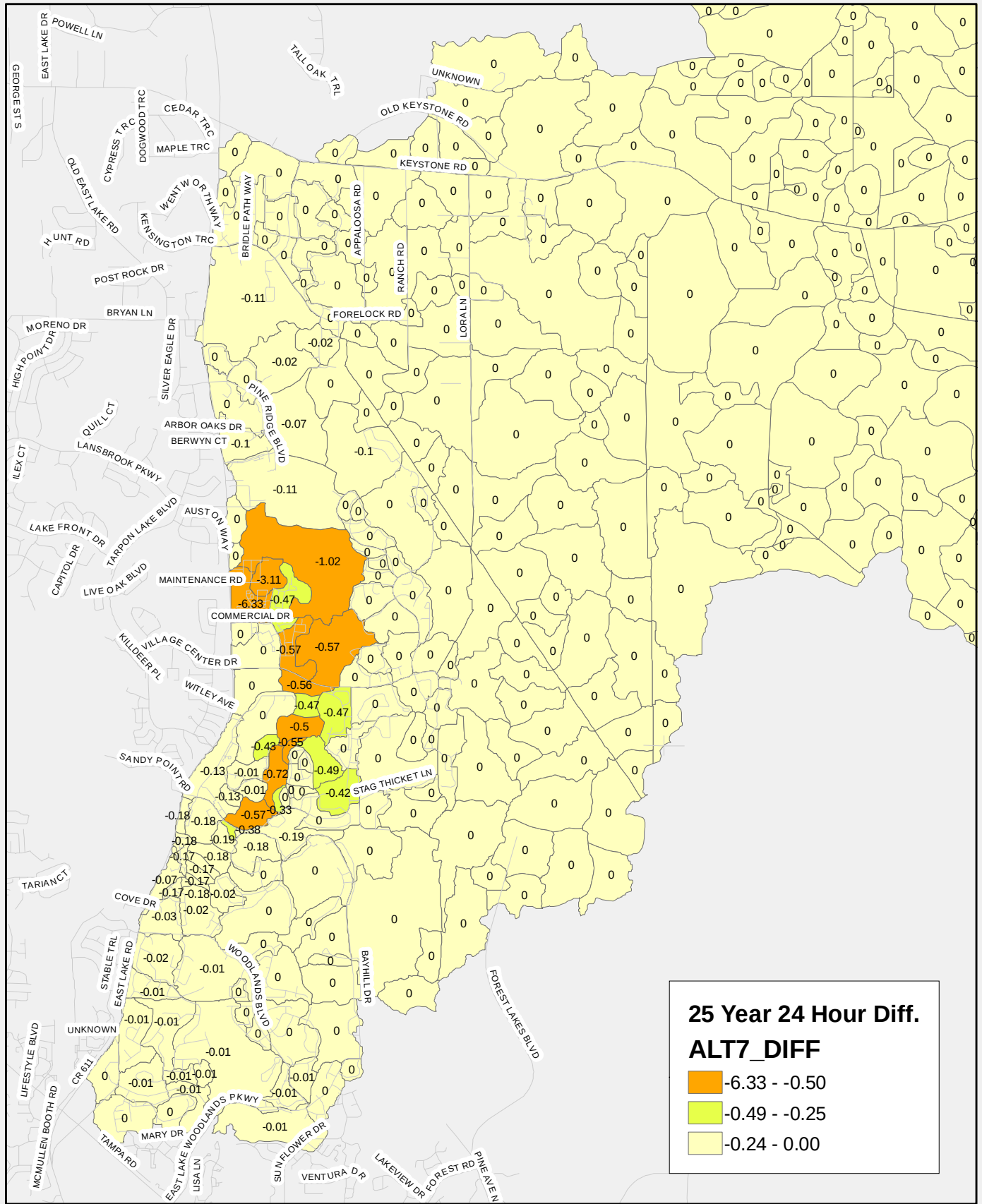
Brooker Creek Watershed
25 Year - Alternative 6



2

0 2,500 5,000
 Feet

URS



Pinellas_roads

**Roads
CLASS**

- Interstate
- Major Roads
- Minor Roads



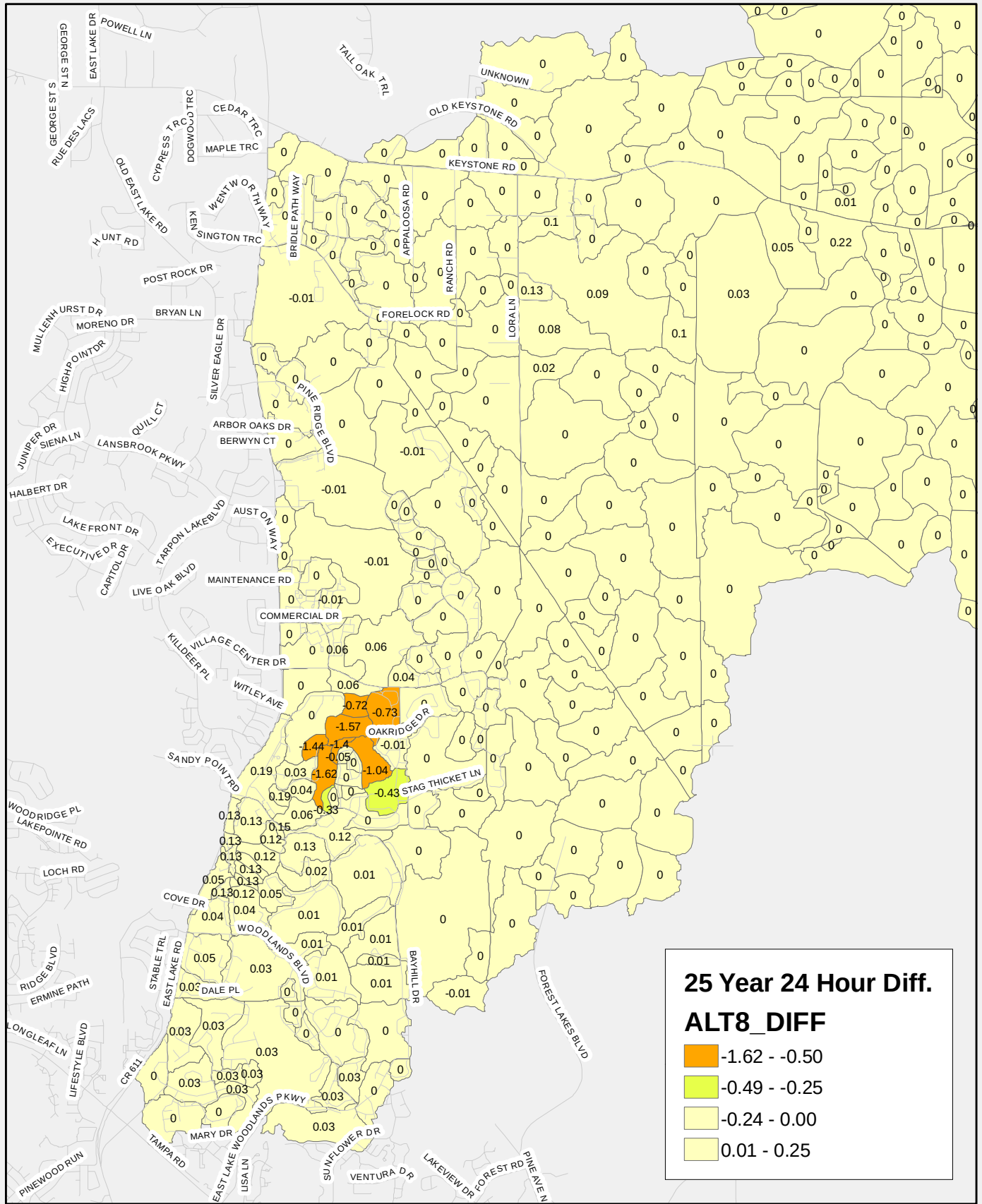
**Brooker Creek Watershed
25 Year - Alternative 7**



2

0 2,500 5,000
Feet

URS



25 Year 24 Hour Diff.

ALT8_DIFF

-1.62 - -0.50

-0.49 - -0.25

-0.24 - 0.00

0.01 - 0.25

Pinellas_roads

Roads

CLASS

Interstate

Major Roads

Minor Roads



Brooker Creek Watershed
25 Year - Alternative 8



2

0 2,500 5,000
Feet

URS

APPENDIX D

Brooker Creek BMP Cost Estimate

PROJECT NAME: Brooker Creek Watershed Management Plan

Project No.:

Cost Estimate - Summary of Alternatives

August 29, 2009

ALTERNATE	DESCRIPTION OF ALTERNATE	COST OF ALTERNATE
1	Construct Weir Structures at Lora Lane and Powerline Culvert Crossings	\$104,440
2	Construct Weir Structures at Lora Lane and Various Powerline Crossings	\$176,080
3	Construct Weir Structures at Lora Lane / Various Powerline Rd. Crossings / Raise Grade Powerline Rd. (3')	\$6,332,800
4	Diversion channel adjacent to Lora Lane and Powerline Rd. to Outfall to Lake Tarpon Canal (8.6 miles)	\$67,419,170
5	Pump Diversion for Brooker Creek at Ridgemoor Dr. to Lake Tarpon	\$15,865,690
6	Pump Diversion from Brooker Creek / Expand Existing Borrow Pit North of Keystone Rd.	\$30,925,950
7	Gravity Flow Diversion at East Lake Rd. to Lake Tarpon	\$5,329,270
8	Brooker Creek High Flow Channel Through Golf Course (TBE OPTION)	\$7,096,560
9	Low Water Crossings	\$500,000
10	Property Acquisition	\$10,000,000
11	Channel Maintenance	\$500,000
12	Do Nothing	N/A

PROJECT NAME: Brooker Creek Watershed Management Plan

Alternate 1 -- Construct Weir Structures at Lora Lane and Powerline Culvert Crossings

FDOT PAY ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITIES	UNIT PRICE	TOTAL PER PAY ITEM
	MOBILIZATION & MAINTENANCE OF TRAFFIC				
101-1	MOBILIZATION \$500,000 - \$999,999 (6% OF PROJECT COST)	LS	1	\$4,516.20	\$4,516.20
102-1	MAINTENANCE OF TRAFFIC (2% OF PROJECT COST)	LS	1	\$1,505.40	\$1,505.40
NA	UTILITY RELOCATION (3% OF PROJECT COST)	LS	1	\$2,258.10	\$2,258.10
	GENERAL CONSTRUCTION OPERATIONS				
104-10-1	HAY OR STRAW BALES (TYPE I)	EA	0	\$10.00	\$0.00
104-13	SILT FENCE, STAKED	LF	200	\$1.75	\$350.00
N/A	PURCHASE EASEMENT OR R/W FOR CULVERT	AC	0	\$35,000.00	\$0.00
	EARTHWORK AND RELATED OPERATIONS				
110-1-1	CLEARING & GRUBBING (INCLUDES TREES < 8")	AC	1	\$15,000.00	\$15,000.00
110	REMOVAL OF EXCESS FILL FROM SITE	CY	0	\$15.00	\$0.00
110-3	STRUCTURES REMOVAL OF EXISTING STRUCTURES (CULVERT)	LF	0	\$75.00	\$0.00
120-1	EXCAVATION, REGULAR, INCLUDING DEWATERING	CY	100	\$6.00	\$600.00
120-5	EXCAVATION CHANNEL	CY	100	\$28.00	\$2,800.00
120-6	EMBANKMENT	CY	10	\$21.00	\$210.00
	ROADWAY CONSTRUCTION				
VARIOUS	REMOVE AND REPLACE PAVEMENT, INCLUDING BASE AND SUBBASE	SY	0	\$142.22	\$0.00
	STRUCTURES				
425-2, 425-3	INLETS OR MANHOLES	EA	0	\$6,683.28	\$0.00
430-12	PIPE CONC CULV. (CLASS III) (48")	LF	60	\$185.00	\$11,100.00
430-12	PIPE CONC CULV. (CLASS III)(60")	LF	32	\$255.00	\$8,160.00
	WEIR CONTROL STRUCTURES				
	48" WEIR STRUCTURE CONCRETE	CY	10	\$1,500.00	\$15,000.00
	60" WEIR STRUCTURE CONCRETE	CY	13	\$1,500.00	\$19,500.00
530-3-4	RIPRAP (RUBBLE)(DITCH LINING)(12")	TN	10	\$75.00	\$750.00
575-1-1	SODDING (BAHIA)	SY	600	\$3.00	\$1,800.00
	MITIGATION				
	POND PLANTINGS	LS	0	\$25,000.00	\$0.00
	PRELIMINARY COST ESTIMATE			COST ESTIMATE SUBTOTAL =	\$83,549.70
	ENGINEERING, SURVEY & GEOTECHNICAL (15%)				\$12,532.46
DATE	CONTINGENCY (10%)				\$8,354.97
9/25/2008	TOTAL				\$104,440

PROJECT NAME: Brooker Creek Watershed Management Plan

Alternate 2 -- Construct Weir Structures at Lora Lane and Various Powerline Crossings

FDOT PAY ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITIES	UNIT PRICE	TOTAL PER PAY ITEM
	MOBILIZATION & MAINTENANCE OF TRAFFIC				
101-1	MOBILIZATION \$500,000 - \$999,999 (6% OF PROJECT COST)	LS	1	\$7,614.24	\$7,614.24
102-1	MAINTENANCE OF TRAFFIC (2% OF PROJECT COST)	LS	1	\$2,538.08	\$2,538.08
NA	UTILITY RELOCATION (3% OF PROJECT COST)	LS	1	\$3,807.12	\$3,807.12
	GENERAL CONSTRUCTION OPERATIONS				
104-10-1	HAY OR STRAW BALES (TYPE I)	EA	0	\$10.00	\$0.00
104-13	SILT FENCE, STAKED	LF	400	\$1.75	\$700.00
N/A	PURCHASE EASEMENT OR R/W FOR CULVERT	AC	0	\$35,000.00	\$0.00
	EARTHWORK AND RELATED OPERATIONS				
110-1-1	CLEARING & GRUBBING (INCLUDES TREES < 8")	AC	2	\$15,000.00	\$30,000.00
110	REMOVAL OF EXCESS FILL FROM SITE	CY	0	\$15.00	\$0.00
110-3	STRUCTURES REMOVAL OF EXISTING STRUCTURES (CULVERT)	LF	0	\$75.00	\$0.00
120-1	EXCAVATION, REGULAR, INCLUDING DEWATERING	CY	200	\$6.00	\$1,200.00
120-5	EXCAVATION CHANNEL	CY	200	\$28.00	\$5,600.00
120-6	EMBANKMENT	CY	20	\$21.00	\$420.00
	ROADWAY CONSTRUCTION				
VARIOUS	REMOVE AND REPLACE PAVEMENT, INCLUDING BASE AND SUBBASE	SY	0	\$142.22	\$0.00
	STRUCTURES				
425-2, 425-3	INLETS OR MANHOLES	EA	0	\$6,683.28	\$0.00
430-12	PIPE CONC CULV. (CLASS III) (24")	LF	60	\$70.00	\$4,200.00
430-12	PIPE CONC CULV. (CLASS III)(36")	LF	32	\$107.00	\$3,424.00
430-12	PIPE CONC CULV. (CLASS III) (48")	LF	60	\$185.00	\$11,100.00
430-12	PIPE CONC CULV. (CLASS III)(60")	LF	32	\$255.00	\$8,160.00
	WEIR CONTROL STRUCTURES				
	24" WEIR STRUCTURE CONCRETE	CY	7	\$1,500.00	\$10,500.00
	36" WEIR STRUCTURE CONCRETE	CY	8	\$1,500.00	\$12,000.00
	48" WEIR STRUCTURE CONCRETE	CY	10	\$1,500.00	\$15,000.00
	60" WEIR STRUCTURE CONCRETE	CY	13	\$1,500.00	\$19,500.00
530-3-4	RIPRAP (RUBBLE)(DITCH LINING)(12")	TN	20	\$75.00	\$1,500.00
575-1-1	SODDING (BAHIA)	SY	1200	\$3.00	\$3,600.00
	MITIGATION				
	POND PLANTINGS	LS	0	\$25,000.00	\$0.00
	PRELIMINARY COST ESTIMATE			COST ESTIMATE SUBTOTAL =	\$140,863.44
	ENGINEERING, SURVEY & GEOTECHNICAL (15%)				\$21,129.52
DATE	CONTINGENCY (10%)				\$14,086.34
9/25/2008	TOTAL				\$176,080

PROJECT NAME: Brooker Creek Watershed Management Plan

Alternate 3 -- Construct Weir Structures at Lora Lane / Various Powerline Rd. Crossings / Raise Grade Powerline Rd. (3')

FDOT PAY ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITIES	UNIT PRICE	TOTAL PER PAY ITEM
	MOBILIZATION & MAINTENANCE OF TRAFFIC				
101-1	MOBILIZATION \$500,000 - \$999,999 (6% OF PROJECT COST)	LS	1	\$273,850.98	\$273,850.98
102-1	MAINTENANCE OF TRAFFIC (2% OF PROJECT COST)	LS	1	\$91,283.66	\$91,283.66
NA	UTILITY RELOCATION (3% OF PROJECT COST)	LS	1	\$136,925.49	\$136,925.49
	GENERAL CONSTRUCTION OPERATIONS				
104-10-1	HAY OR STRAW BALES (TYPE I)	EA	0	\$10.00	\$0.00
104-13	SILT FENCE, STAKED	LF	15800	\$1.75	\$27,650.00
N/A	PURCHASE EASEMENT OR R/W FOR CULVERT	AC	0	\$35,000.00	\$0.00
	EARTHWORK AND RELATED OPERATIONS				
110-1-1	CLEARING & GRUBBING (INCLUDES TREES < 8")	AC	2	\$15,000.00	\$30,000.00
110	REMOVAL OF EXCESS FILL FROM SITE	CY	0	\$15.00	\$0.00
110-3	STRUCTURES REMOVAL OF EXISTING STRUCTURES (CULVERT)	LF	40	\$75.00	\$3,000.00
120-1	EXCAVATION, REGULAR, INCLUDING DEWATERING	CY	200	\$6.00	\$1,200.00
120-5	EXCAVATION CHANNEL	CY	200	\$28.00	\$5,600.00
120-6	EMBANKMENT	CY	200133	\$21.00	\$4,202,793.00
	ROADWAY CONSTRUCTION				
VARIOUS	REMOVE AND REPLACE PAVEMENT, INCLUDING BASE AND SUBBASE	SY	0	\$142.22	\$0.00
	SHELL MATERIAL FOR ROAD	CY	5800	\$12.00	\$69,600.00
	STRUCTURES				
425-2, 425-3	INLETS OR MANHOLES	EA	0	\$6,683.28	\$0.00
430-12	PIPE CONC CULV. (CLASS III) (24")	LF	40	\$70.00	\$2,800.00
430-12	PIPE CONC CULV. (CLASS III)(36")	LF	40	\$107.00	\$4,280.00
430-12	PIPE CONC CULV. (CLASS III) (48")	LF	60	\$185.00	\$11,100.00
430-12	PIPE CONC CULV. (CLASS III)(60")	LF	32	\$255.00	\$8,160.00
	WEIR CONTROL STRUCTURES				
	24" WEIR STRUCTURE CONCRETE	CY	14	\$1,500.00	\$21,000.00
	36" WEIR STRUCTURE CONCRETE	CY	24	\$1,500.00	\$36,000.00
	48" WEIR STRUCTURE CONCRETE	CY	10	\$1,500.00	\$15,000.00
	60" WEIR STRUCTURE CONCRETE	CY	13	\$1,500.00	\$19,500.00
530-3-4	RIPRAP (RUBBLE)(DITCH LINING)(12")	TN	20	\$75.00	\$1,500.00
575-1-1	SODDING (BAHIA)	SY	35000	\$3.00	\$105,000.00
	MITIGATION				
	POND PLANTINGS	LS	0	\$25,000.00	\$0.00
	PRELIMINARY COST ESTIMATE			COST ESTIMATE SUBTOTAL =	\$5,066,243.13
	ENGINEERING, SURVEY & GEOTECHNICAL (15%)				\$759,936.47
DATE	CONTINGENCY (10%)				\$506,624.31
9/25/2008	TOTAL				\$6,332,800

PROJECT NAME: Brooker Creek Watershed Management Plan

Alternate 4 -- Diversion channel adjacent to Lora Lane and Powerline Rd. to Outfall to Lake Tarpon Canal (8.6 miles)

FDOT PAY ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITIES	UNIT PRICE	TOTAL PER PAY ITEM
	MOBILIZATION & MAINTENANCE OF TRAFFIC				
101-1	MOBILIZATION \$500,000 - \$999,999 (6% OF PROJECT COST)	LS	1	\$2,915,423.40	\$2,915,423.40
102-1	MAINTENANCE OF TRAFFIC (2% OF PROJECT COST)	LS	1	\$971,807.80	\$971,807.80
NA	UTILITY RELOCATION (3% OF PROJECT COST)	LS	1	\$1,457,711.70	\$1,457,711.70
	GENERAL CONSTRUCTION OPERATIONS				
104-10-1	HAY OR STRAW BALES (TYPE I)	EA	0	\$10.00	\$0.00
104-13	SILT FENCE, STAKED	LF	400	\$1.75	\$700.00
N/A	PURCHASE EASEMENT OR R/W FOR CULVERT	AC	0	\$35,000.00	\$0.00
	EARTHWORK AND RELATED OPERATIONS				
110-1-1	CLEARING & GRUBBING (INCLUDES TREES < 8")	AC	10	\$15,000.00	\$150,000.00
110	REMOVAL OF EXCESS FILL FROM SITE	CY	0	\$15.00	\$0.00
110-3	STRUCTURES REMOVAL OF EXISTING STRUCTURES (CULVERT)	LF	40	\$75.00	\$3,000.00
120-1	EXCAVATION, REGULAR, INCLUDING DEWATERING	CY	0	\$6.00	\$0.00
120-5	EXCAVATION CHANNEL	CY	1688170	\$28.00	\$47,268,760.00
120-6	EMBANKMENT	CY	48230	\$21.00	\$1,012,830.00
	ROADWAY CONSTRUCTION				
VARIOUS	REMOVE AND REPLACE PAVEMENT, INCLUDING BASE AND SUBBASE	SY	0	\$142.22	\$0.00
	STRUCTURES				
425-2, 425-3	INLETS OR MANHOLES	EA	0	\$6,683.28	\$0.00
430-12	PIPE CONC CULV. (CLASS III) (24")	LF	0		\$0.00
430-12	PIPE CONC CULV. (CLASS III)(36")	LF	0		\$0.00
430-12	PIPE CONC CULV. (CLASS III) (48")	LF	0	\$185.00	\$0.00
430-12	PIPE CONC CULV. (CLASS III)(60")	LF	0	\$255.00	\$0.00
	WEIR CONTROL STRUCTURES				
	CONTROL STRUCTURE	EA	1	\$100,000.00	\$100,000.00
530-3-4	RIPRAP (RUBBLE)(DITCH LINING)(12")	TN	20	\$75.00	\$1,500.00
575-1-1	SODDING (BAHIA)	SY	1200	\$3.00	\$3,600.00
	MITIGATION				
	POND PLANTINGS	LS	2	\$25,000.00	\$50,000.00
	PRELIMINARY COST ESTIMATE			COST ESTIMATE SUBTOTAL =	\$53,935,332.90
	ENGINEERING, SURVEY & GEOTECHNICAL (15%)				\$8,090,299.94
DATE	CONTINGENCY (10%)				\$5,393,533.29
9/25/2008	TOTAL				\$67,419,170

PROJECT NAME: Brooker Creek Watershed Management Plan

Alternate 5 -- Pump Diversion for Brooker Creek at Ridgemoor Dr. to Lake Tarpon

FDOT PAY ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITIES	UNIT PRICE	TOTAL PER PAY ITEM
	MOBILIZATION & MAINTENANCE OF TRAFFIC				
101-1	MOBILIZATION \$500,000 - \$999,999 (6% OF PROJECT COST)	LS	1	\$686,083.92	\$686,083.92
102-1	MAINTENANCE OF TRAFFIC (2% OF PROJECT COST)	LS	1	\$228,694.64	\$228,694.64
NA	UTILITY RELOCATION (3% OF PROJECT COST)	LS	1	\$343,041.96	\$343,041.96
	GENERAL CONSTRUCTION OPERATIONS				
104-10-1	HAY OR STRAW BALES (TYPE I)	EA	0	\$10.00	\$0.00
104-13	SILT FENCE, STAKED	LF	20600	\$1.75	\$36,050.00
N/A	PURCHASE EASEMENT OR R/W FOR CULVERT	AC	5	\$35,000.00	\$175,000.00
	EARTHWORK AND RELATED OPERATIONS				
110-1-1	CLEARING & GRUBBING (INCLUDES TREES < 8")	AC	2	\$15,000.00	\$30,000.00
110	REMOVAL OF EXCESS FILL FROM SITE	CY	0	\$15.00	\$0.00
110-3	STRUCTURES REMOVAL OF EXISTING STRUCTURES (CULVERT)	LF	40	\$75.00	\$3,000.00
120-1	EXCAVATION, REGULAR, INCLUDING DEWATERING	CY	56622	\$6.00	\$339,732.00
120-5	EXCAVATION CHANNEL	CY	0	\$28.00	\$0.00
120-6	EMBANKMENT	CY	0	\$21.00	\$0.00
	ROADWAY CONSTRUCTION				
VARIOUS	REMOVE AND REPLACE PAVEMENT, INCLUDING BASE AND SUBBASE	SY	0	\$142.22	\$0.00
	STRUCTURES				
425-2, 425-3	INLETS OR MANHOLES	EA	0	\$6,683.28	\$0.00
430-12	PIPE CONC CULV. (CLASS III) (24")	LF	0	\$70.00	\$0.00
430-12	PIPE CONC CULV. (CLASS III)(36")	LF	0	\$107.00	\$0.00
430-12	PIPE CONC CULV. (CLASS III) (48")	LF	0	\$185.00	\$0.00
430-12	PIPE CONC CULV. (CLASS III)(60")	LF	0	\$255.00	\$0.00
430-12	PIPE CONC CULV. (CLASS III)(72") (2 at 10,300')	LF	20,600	\$255.00	\$5,253,000.00
556-1-9	JACK & BORE 72" UNDER EAST LAKE ROAD	LF	200	\$2,100.00	\$420,000.00
400-91-3	DEWATERING/HEADER INSTALL AND REMOVE (>300 LF)	LF	10,300	\$12.00	\$123,600.00
	PUMP STATION				
	PUMP STATION (Building, Pumps, Generator, Inflow) 400 cfs	LS	1	\$5,000,000.00	\$5,000,000.00
530-3-4	RIPRAP (RUBBLE)(DITCH LINING)(12")	TN	10	\$75.00	\$750.00
575-1-1	SODDING (BAHIA)	SY	1200	\$3.00	\$3,600.00
	MITIGATION				
	POND PLANTINGS	LS	2	\$25,000.00	\$50,000.00
	PRELIMINARY COST ESTIMATE			COST ESTIMATE SUBTOTAL =	\$12,692,552.52
	ENGINEERING, SURVEY & GEOTECHNICAL (15%)				\$1,903,882.88
DATE	CONTINGENCY (10%)				\$1,269,255.25
9/25/2008	TOTAL				\$15,865,690

PROJECT NAME: Brooker Creek Watershed Management Plan

Alternate 6 -- Pump Diversion from Brooker Creek / Expand Existing Borrow Pit North of Keystone Rd.

FDOT PAY ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITIES	UNIT PRICE	TOTAL PER PAY ITEM
	MOBILIZATION & MAINTENANCE OF TRAFFIC				
101-1	MOBILIZATION \$500,000 - \$999,999 (6% OF PROJECT COST)	LS	1	\$1,337,338.20	\$1,337,338.20
102-1	MAINTENANCE OF TRAFFIC (2% OF PROJECT COST)	LS	1	\$445,779.40	\$445,779.40
NA	UTILITY RELOCATION (3% OF PROJECT COST)	LS	1	\$668,669.10	\$668,669.10
	GENERAL CONSTRUCTION OPERATIONS				
104-10-1	HAY OR STRAW BALES (TYPE I)	EA	0	\$10.00	\$0.00
104-13	SILT FENCE, STAKED	LF	7600	\$1.75	\$13,300.00
N/A	PURCHASE EASEMENT OR R/W FOR CULVERT	AC	0	\$35,000.00	\$0.00
	EARTHWORK AND RELATED OPERATIONS				
110-1-1	CLEARING & GRUBBING (INCLUDES TREES < 8")	AC	10	\$15,000.00	\$150,000.00
110	REMOVAL OF EXCESS FILL FROM SITE	CY	0	\$15.00	\$0.00
110-3	STRUCTURES REMOVAL OF EXISTING STRUCTURES (CULVERT)	LF	40	\$75.00	\$3,000.00
120-1	EXCAVATION, REGULAR, INCLUDING DEWATERING	CY	2507120	\$6.00	\$15,042,720.00
120-5	EXCAVATION CHANNEL	CY	0	\$28.00	\$0.00
120-6	EMBANKMENT	CY	0	\$21.00	\$0.00
	ROADWAY CONSTRUCTION				
VARIOUS	REMOVE AND REPLACE PAVEMENT, INCLUDING BASE AND SUBBASE	SY	0	\$142.22	\$0.00
	STRUCTURES				
425-2, 425-3	INLETS OR MANHOLES	EA	0	\$6,683.28	\$0.00
430-12	PIPE CONC CULV. (CLASS III) (24")	LF	0		\$0.00
430-12	PIPE CONC CULV. (CLASS III)(36")	LF	0		\$0.00
430-12	PIPE CONC CULV. (CLASS III) (48")	LF	0	\$185.00	\$0.00
430-12	PIPE CONC CULV. (CLASS III)(60")	LF	0	\$255.00	\$0.00
430-12	PIPE CONC CULV. (CLASS III)(72")	LF	7,600	\$255.00	\$1,938,000.00
400-91-3	DEWATERING/ HEADER INSTALL AND REMOVE (>300 LF)	LF	7,600	\$12.00	\$91,200.00
	PUMP STATION				
	PUMP STATION (Building, Pumps, Generator, Inflow) 400 cfs	LS	1	\$5,000,000.00	\$5,000,000.00
530-3-4	RIPRAP (RUBBLE)(DITCH LINING)(12")	TN	10	\$75.00	\$750.00
575-1-1	SODDING (BAHIA)	SY	0	\$3.00	\$0.00
	MITIGATION				
	POND PLANTINGS	LS	2	\$25,000.00	\$50,000.00
	PRELIMINARY COST ESTIMATE			COST ESTIMATE SUBTOTAL =	\$24,740,756.70
	ENGINEERING, SURVEY & GEOTECHNICAL (15%)				\$3,711,113.51
DATE	CONTINGENCY (10%)				\$2,474,075.67
9/25/2008	TOTAL				\$30,925,950

PROJECT NAME: Brooker Creek Watershed Management Plan

Alternate 7 -- Gravity Flow Diversion at East Lake Rd. to Lake Tarpon

FDOT PAY ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITIES	UNIT PRICE	TOTAL PER PAY ITEM
	MOBILIZATION & MAINTENANCE OF TRAFFIC				
101-1	MOBILIZATION \$500,000 - \$999,999 (6% OF PROJECT COST)	LS	1	\$230,455.02	\$230,455.02
102-1	MAINTENANCE OF TRAFFIC (2% OF PROJECT COST)	LS	1	\$76,818.34	\$76,818.34
NA	UTILITY RELOCATION (3% OF PROJECT COST)	LS	1	\$115,227.51	\$115,227.51
	GENERAL CONSTRUCTION OPERATIONS				
104-10-1	HAY OR STRAW BALES (TYPE I)	EA	0	\$10.00	\$0.00
104-13	SILT FENCE, STAKED	LF	1300	\$1.75	\$2,275.00
N/A	PURCHASE EASEMENT OR R/W FOR CULVERT	AC	4	\$35,000.00	\$140,000.00
	EARTHWORK AND RELATED OPERATIONS				
110-1-1	CLEARING & GRUBBING (INCLUDES TREES < 8")	AC	4	\$15,000.00	\$60,000.00
110	REMOVAL OF EXCESS FILL FROM SITE	CY	0	\$15.00	\$0.00
110-3	STRUCTURES REMOVAL OF EXISTING STRUCTURES (CULVERT)	LF	40	\$75.00	\$3,000.00
120-1	EXCAVATION, REGULAR, INCLUDING DEWATERING	CY	5200	\$6.00	\$31,200.00
120-5	EXCAVATION CHANNEL	CY	11400	\$28.00	\$319,200.00
120-6	EMBANKMENT	CY	14670	\$21.00	\$308,070.00
	ROADWAY CONSTRUCTION				
VARIOUS	REMOVE AND REPLACE PAVEMENT, INCLUDING BASE AND SUBBASE	SY	3600	\$142.22	\$511,992.00
	STRUCTURES				
425-2, 425-3	INLETS OR MANHOLES	EA	4	\$10,000.00	\$40,000.00
430-12	PIPE CONC CULV. (CLASS III) (24")	LF	0		\$0.00
430-12	PIPE CONC CULV. (CLASS III)(36")	LF	0		\$0.00
430-12	PIPE CONC CULV. (CLASS III) (48")	LF	0	\$185.00	\$0.00
430-12	PIPE CONC CULV. (CLASS III)(60")	LF	1800	\$255.00	\$459,000.00
430-12	PIPE CONC CULV. (CLASS III)(72")	LF	0	\$255.00	\$0.00
	CONCRETE HEADWALL (60")	EA	6	\$10,000.00	\$60,000.00
556-1-8	JACK & BORE 60" UNDER EAST LAKE ROAD	LF	900	\$1,800.00	\$1,620,000.00
400-91-3	DEWATERING/ HEADER INSTALL AND REMOVE (>300 LF)	LF	2,140	\$12.00	\$25,680.00
	WEIR CONTROL STRUCTURE				
	CONTROL STRUCTURE	EA	2	\$100,000.00	\$200,000.00
530-3-4	RIPRAP (RUBBLE)(DITCH LINING)(12")	TN	20	\$75.00	\$1,500.00
575-1-1	SODDING (BAHIA)	SY	3000	\$3.00	\$9,000.00
	MITIGATION				
	POND PLANTINGS	LS	2	\$25,000.00	\$50,000.00
	PRELIMINARY COST ESTIMATE			COST ESTIMATE SUBTOTAL =	\$4,263,417.87
	ENGINEERING, SURVEY & GEOTECHNICAL (15%)				\$639,512.68
DATE	CONTINGENCY (10%)				\$426,341.79
9/25/2008	TOTAL				\$5,329,270

PROJECT NAME: Brooker Creek Watershed Management Plan

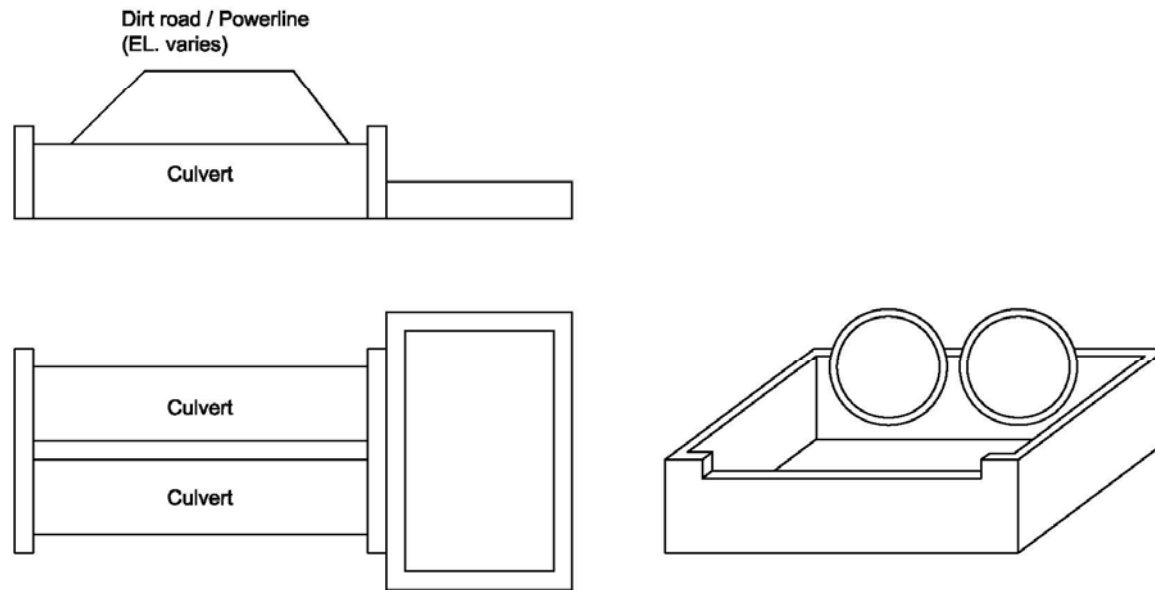
Alternate 8 -- Brooker Creek High Flow Channel Through Golf Course (TBE OPTION)

FDOT PAY ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITIES	UNIT PRICE	TOTAL PER PAY ITEM
	MOBILIZATION	LS	1	\$516,100.00	\$516,100.00
	MAINTENANCE OF TRAFFIC	LS	1	\$50,000.00	\$50,000.00
	Turbidity Barrier Staked	LF	4000	\$10.00	\$40,000.00
	Staked Silt Fence	LF	9000	\$3.00	\$27,000.00
	Turbidity Barrier Floating	LF	1000	\$20.00	\$20,000.00
	Clearing and Grubbing	AC	6	\$50,000.00	\$300,000.00
	Excavation, Channel	CY	47604	\$25.00	\$1,190,100.00
	Bedding Material, Crushed Stone (contingency)	TN	500	\$30.00	\$15,000.00
	Concrete, Class II (contingency)	CY	100	\$1,000.00	\$100,000.00
	Concrete, Class II, 60" ID, Endwalls	CY	25	\$1,500.00	\$37,500.00
	Pipe Culvert, Concrete, Round, 60" ID (Bypass Pipe)	LF	1090	\$500.00	\$545,000.00
	Gabion Baskets. 36" thick	SY	308	\$340.00	\$104,720.00
					\$0.00
	Riprap, Articulating Block (contingency)	SY	1600	\$125.00	\$200,000.00
	Seed and Mulch (wetland species-includes watering)	SY	36366	\$5.00	\$181,830.00
	Utility Adjustments (contingency)	LS	1	\$100,000.00	\$100,000.00
	Wetland Mitigation (plus contingency)	AC	6.5	\$300,000.00	\$1,950,000.00
	Pedestrian Bridges	LS	2	\$150,000.00	\$300,000.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
	PRELIMINARY COST ESTIMATE			COST ESTIMATE SUBTOTAL =	\$5,677,250.00
	ENGINEERING, SURVEY & GEOTECHNICAL (15%)				\$851,587.50
DATE	CONTINGENCY (10%)				\$567,725.00
9/25/2008	TOTAL				\$7,096,560

APPENDIX E

Weir Concept for BMP – Alternative 1-3

WEIR CONCEPT FOR BMP ALTERNATIVES 1-3



WEIR ALTERNATIVE