

## Memorandum

To: Bassett Creek Watershed Management Commission  
From: Barr Engineering Co.  
Subject: Item 5A–Request from AMLAC to Install a Controllable Weir at the Outlet Dam on Medicine Lake  
BCWMC October 18, 2012 Meeting Agenda  
Date: October 11, 2012  
Project: 23270051 2012 030

### 5A. Request from AMLAC to Install a Controllable Weir at the Medicine Lake Dam

#### Recommendations:

- a. For discussion: review the attached information in preparation for discussion at October 18, 2012 Commission meeting.

#### Background

On August 16, 2012 Chair Black received an email from Association of Medicine Lake Area Citizens (AMLAC) Board member Gary Holter requesting that BCWMC install a controllable weir at the Medicine Lake dam, similar to that on Lake Minnetonka at Grays Bay. This request is related to AMLAC's November 8, 2011 request that the BCWMC create a document on the Medicine Lake dam and lake level, and is similar to the City of Medicine Lake's May 13, 2010 request that the Commission conduct a study to learn if the outlet structure (dam) releases water too quickly and if modifications to the structure are warranted. Also, in October 2009, the Commission directed the engineer to prepare a memorandum in response to AMLAC's request to comment on the low water levels and the design of the outlet structure.

At the August 16, 2012 Commission meeting, the Commission directed staff to pull together the past information that has been presented to the Commission and to AMLAC regarding the Medicine Lake dam, along with any inspection results. Attached to this memorandum is the following previously-provided information (plus minutes):

- October 22, 2009 memorandum to AMLAC
- June 9, 2010 memorandum to the Commission regarding the City of Medicine Lake's request
- June 17, 2010 Commission meeting minutes

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- August 9, 2010 memorandum to the Commission regarding the City of Medicine Lake’s request
- August 19, 2010 Commission meeting minutes
- November 8, 2011 letter from AMLAC

Also attached are the following additional/updated items:

- Updated Medicine Lake water levels graph (through October 1, 2012)
- Updated annual rainfall graph (through 2011)
- August 24, 2012 email from Derek Asche and accompanying agreement regarding the Medicine Lake dam, which states that the dam is owned by Hennepin County.

The Commission also requested the results of any inspections of the dam. Jim Herbert (Barr) performed two recent inspections – one on April 12, 2012 (in response to April 9, 2012 letter to Chair Black from Commissioner Hoshal), and the other on August 24, 2012. Summaries of each inspection follow.

**April 12, 2012 inspection summary:**

- **Background:** The Medicine Lake outlet structure was constructed in 1996. The South Shore Drive bridge in the vicinity of the outlet structure was replaced during 2010. Staff previously inspected the outlet structure in November 2010 as part of the BCWMC flood control project inspections (no deficiencies were noted).
- The outlet structure was inspected April 12, 2012 at approximately 2:00 PM. Conditions were clear, dry and about 65°F.
- The water level on the upstream (lake) side of the dam (headwater) was 0.23 ft. (3-inches) below the crest/overflow; the water level on the downstream side of the dam (tailwater) was 1.65 ft. below crest/overflow; significant flow was not observed in Bassett Creek.
- The structure appeared in good operating condition. Concrete appeared in good condition, with no significant cracking.
- Evidence of seepage was not observed through or around the structure.
- Review of original drawings for the dam (2327796D3) indicates the structure consists of a concrete cap (8.0 feet at abutments, 6.6 feet at the overflow) with 27.0 feet of sheetpile cutoff below the concrete cap. A 6-inch bentonite seal was installed along the entire upstream front face of the structure, between the bottom of the riprap and bottom of the excavation. The condition of the seal cannot be observed, but compromising the seal could result in seepage through the structure around the sheetpile/concrete cap interface or through the sheetpile joints at the bottom of the excavation.

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**August 24, 2012 inspection summary:**

- The outlet structure was inspected on August 24, 2012 at approximately 2:00 PM. Conditions were clear, wind about 5-15 mph, and about 80°F.
- The water level on the upstream (lake) side of the dam (headwater) was 0.1 ft. (1.2-inches) below the crest/overflow (gauge reading = 0.64); the water level on the downstream side of the dam (tailwater) was 1.85 ft. below crest/overflow; significant flow was not observed in Bassett Creek.
- The inspection was performed by Jim Herbert (Barr). Also present for the inspection were Dick Favreau (lives adjacent to structure at east side of creek) and Ted Hoshal (Medicine Lake Commissioner).
- Commissioner Hoshal requested that Mr. Favreau join in the inspection because of the seepage he noted at the dam about three years ago. Mr. Favreau indicated he observed seepage (small boil) three years ago, near the downstream face of the dam, approximately three feet west of the gauge. Mr. Favreau indicated the downstream pool was generally dry during his observation.
- Commissioner Hoshal also commented on the loss of stain over much of the structure (concrete form liner).
- Downstream face of the east 2/3 of the dam structure was moist due to water passing over the dam due to wind or wave action. Seepage as previously noted by Mr. Favreau, or seepage through the structure or embankments was not observed during the inspection. Other comments are consistent with April 9, 2012 inspection.
- Future maintenance could include cleaning and staining the structure.

## Next Steps

As noted in the referenced memos to the Commission, a major concern with modifying the lake's water level is its impact on the flood level of Medicine Lake, and on adjacent homes and properties. Detailed modeling would be required to predict the impact and any changes in the 100-year (and smaller) flood levels. If the modification were to result in an increase in the 100-year flood elevation, the August 9, 2010 memorandum to the Commission pointed out that a flowage easement would be needed from all properties affected by the increase (due to potential loss of property), and the easement would likely be required up to the new 100-year flood level. If there would be an increase in the 100-year flood level, a Letter of Map Revision (LOMR) or Letter of Map Amendment (LOMA) would need to be obtained. Before approval of the LOMR or LOMA, easements would need to be obtained up to the new 100-year flood level. The August 9, 2010 memo also points out that at the time the dam was replaced there were several homes with low floors lower than the 100-year flood level; many of these homes have since been replaced, therefore a new survey of properties around the lake would be need to be conducted if the normal water level is raised. Also, current BCWMC, city, and MDNR floodplain management policies

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require the lowest floor of permanent structures to be at least 2 feet above the established 100-year flood elevation.

However, if the goal is to modify and operate the outlet structure in a manner so as to not increase the 100-year flood level on the lake, detailed modeling of the outlet modification and operation would be required to determine the impact on Medicine Lake and Bassett Creek flood levels. To maintain higher water levels between storms without increasing the 100-year flood level would likely require the discharge of higher flows out of the lake during storm events.

The Commission could consider performing the first steps in pursuing a change to the Medicine Lake outlet – i.e., 1) identify all of the properties that would need easements should there be an increase in the 100-year flood level; 2) conduct a survey of low home elevations and other permanent structures around the lake; and 3) perform detailed modeling of any proposed outlet modifications and outlet operation.

Many other steps would need to be completed before any changes could be made to the outlet, including appraisals to determine easement acquisition costs, assessment of impacts to city (Plymouth and Medicine Lake) infrastructure, an assessment of impacts to the shoreline, an assessment of environmental impacts, permitting (a Minnesota Department of Natural Resources permit will be needed; other permits may be required), coordination with Hennepin County (owner of the dam), and acquisition of easements.

# Bassett Creek Watershed Management Commission

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## Memorandum

**To:** Terrie Christian, President, Association of Medicine Lake Area Citizens (AMLAC)  
**From:** Barr Engineering Company  
**Subject:** Medicine Lake Water Levels and Outlet Structure  
**Date:** October 22, 2009  
**Project:** 23/27 051 2009 030

The Bassett Creek Watershed Management Commission (BCWMC) has been requested to comment on the recent low water levels at Medicine Lake and the design of the existing Medicine Lake dam.

### Medicine Lake Water Levels

The BCWMC has monitored Medicine Lake water levels since 1972. During the last 37 years, Medicine Lake, as well as other metro lakes, has experienced periods of drought and periods of high water. The period of low water levels observed at Medicine Lake during summer 2009 was typical of several lakes in the metro area. The Minnesota Department of Natural Resources (DNR) Hydrologic Conditions Report for September, 2009 reports that lake levels remained below normal for indicator lakes in the metro area. Indicator lakes with below normal water levels included Lake Minnetonka in Hennepin County, Upper Prior Lake in Scott County, and White Bear Lake, on the border of Ramsey and Washington Counties. White Bear Lake had its lowest September water level on record. Significantly low water levels have also been noted at Parkers Lake in the city of Plymouth. According to the Hydrologic Conditions Report, precipitation for the metro area for the period of April 1, 2009 – September 28, 2009 was 6 to 9 inches below normal; the report is included as an attachment to this memo.

The low water levels in 2009 are not unique; Medicine Lake has experienced similar periods of drought and low water levels in the past, as indicated in Figure 1. Water levels as low, or lower than, 2009 low water levels have been measured at Medicine Lake in 13 of the 37 years of which water levels have been recorded. These 13 dates are called out on Figure 1.

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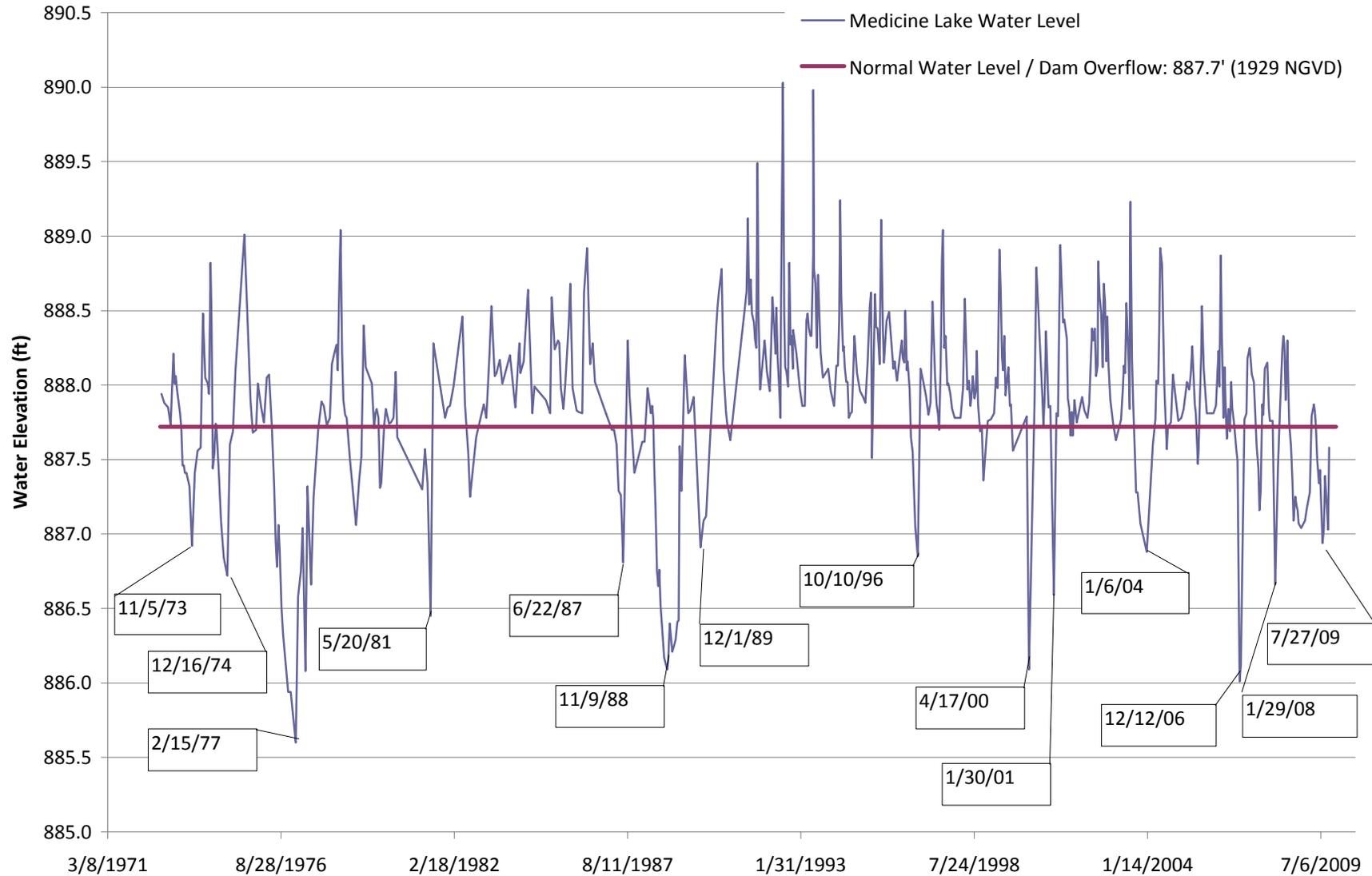
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### **Medicine Lake Outlet/Dam**

The Medicine Lake outlet/dam is located at the south end of the main basin of the lake, near South Shore Drive. The outlet/dam is 14 feet wide at the normal level; the structure discharges water from Medicine Lake directly to Bassett Creek. The outlet structure maintains the normal water elevation of Medicine Lake at approximately 887.7 feet (NGVD 29). (The normal water elevation is the elevation at which water will begin to flow out of the lake/over the control structure). The discharge (normal) elevation of the structure is approximately three feet above the level of the creek channel. The BCWMC, City of Plymouth, DNR and Hennepin County replaced the Medicine Lake outlet structure because the old dam had deteriorated and was leaking severely, and because additional capacity was needed for flood flows. The new/current structure was constructed to the same normal water elevation as the previous structure, as required by the DNR permit. The structure was designed to minimize seepage and other leakage from the structure. The “stepped” weir (outlet) of the current structure was designed and installed, in close coordination with the DNR, to address fisheries concerns and to minimize the duration of potential flooding during high flows. Changing the current outlet structure would not have any effect on the current drought conditions because the water level is already below the crest (normal level) of the dam. Modifying the outlet structure by reducing the width of the dam crest or installing a v-notch weir, would slow the release of water from the lake, and temporarily maintain higher water levels; however, it would also increase the flooding potential at several of the low homes around the lake. Any proposed modifications to the existing structure would require detailed analysis and approval from the DNR, BCWMC, the city of Plymouth, and the city of Medicine Lake to ensure changes do not increase flooding impacts.

# Figure 1: Medicine Lake Water Levels 1972-2009

October 19, 2009



Minnesota Department of Natural Resources

Division of Waters

## Hydrologic Conditions Report

September 2009

### Summary

This is the third installment of the monthly Hydrologic Conditions Report. For comparative purposes please reference the previous 2009 reports at:

[http://mndnr.gov/current\\_conditions/hydro\\_conditions.html](http://mndnr.gov/current_conditions/hydro_conditions.html)

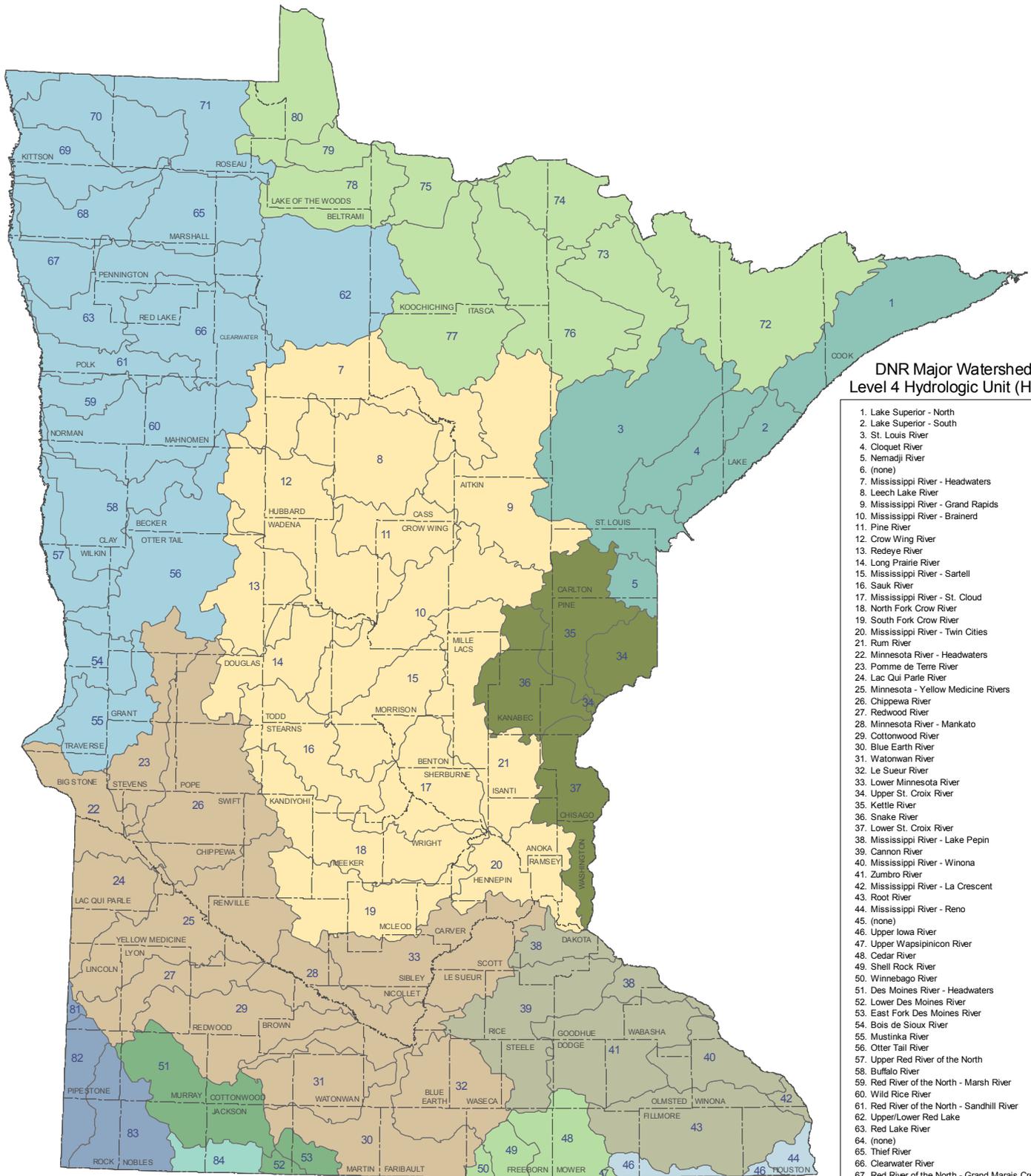
The significant rains in August were followed by the one of the warmest and driest Septembers in the modern record. Precipitation for the growing season (April through September) fell short of normal by five or more inches in many locales.

- By late September, 30% of Minnesota's landscape was placed in "Moderate", "Severe", or "Extreme" drought categories by the U.S. Drought Monitor. In many counties, the 2009 growing season ranked among the 10 driest ever.
- Stream flows in September declined through much of the state. Flows in the central part of the state, upper Mississippi River basin and the southeast fell to below normal or less with flows at some indicator gages below the 10<sup>th</sup> percentile when compared to historical flows for September.
- Indicator lakes remained below normal in the metro, south central and eastern part of the state. Water levels at White Bear and North Center lakes were the lowest historically recorded in the month of September. Water levels were generally normal to high in the northwest and in the normal range in the northeast part of the state.
- Ground water indicator wells continue to show declining conditions in the metro area. Levels in the southwest rose to the normal range, while levels in indicator wells in the central and northeast part of the state remained in the normal to high range. Ground water levels in wells in the northwest fell to the normal to low water ranges when compared to historical levels.

*The information in this report is provided by DNR through long term programs committed to recording and tracking the long term status of our water resources. The current conditions of precipitation, stream flows, lake levels and ground water levels in this report provide valuable information for natural and economic resource management on a state, county and watershed level.*

*If you have questions on the content of this report please contact Greg Spoden: **651-296-4214**, [greg.spoden@state.mn.us](mailto:greg.spoden@state.mn.us)*

# Minnesota Counties and Major Watershed Index



## DNR Major Watershed - Level 4 Hydrologic Unit (HUC8)

1. Lake Superior - North
2. Lake Superior - South
3. St. Louis River
4. Cloquet River
5. Nemadji River
6. (none)
7. Mississippi River - Headwaters
8. Leech Lake River
9. Mississippi River - Grand Rapids
10. Mississippi River - Brainerd
11. Pine River
12. Crow Wing River
13. Redeye River
14. Long Prairie River
15. Mississippi River - Sartell
16. Sauk River
17. Mississippi River - St. Cloud
18. North Fork Crow River
19. South Fork Crow River
20. Mississippi River - Twin Cities
21. Rum River
22. Minnesota River - Headwaters
23. Pomme de Terre River
24. Lac Qui Parle River
25. Minnesota - Yellow Medicine Rivers
26. Chippewa River
27. Redwood River
28. Minnesota River - Mankato
29. Cottonwood River
30. Blue Earth River
31. Watonwan River
32. Le Sueur River
33. Lower Minnesota River
34. Upper St. Croix River
35. Kettle River
36. Snake River
37. Lower St. Croix River
38. Mississippi River - Lake Pepin
39. Cannon River
40. Mississippi River - Winona
41. Zumbro River
42. Mississippi River - La Crescent
43. Root River
44. Mississippi River - Reno
45. (none)
46. Upper Iowa River
47. Upper Wapsipicon River
48. Cedar River
49. Shell Rock River
50. Winnebago River
51. Des Moines River - Headwaters
52. Lower Des Moines River
53. East Fork Des Moines River
54. Bois de Sioux River
55. Mustinka River
56. Otter Tail River
57. Upper Red River of the North
58. Buffalo River
59. Red River of the North - Marsh River
60. Wild Rice River
61. Red River of the North - Sandhill River
62. Upper/Lower Red Lake
63. Red Lake River
64. (none)
65. Thief River
66. Clearwater River
67. Red River of the North - Grand Marais Creek
68. Snake River
69. Red River of the North - Tamarac River
70. Two Rivers
71. Roseau River
72. Rainy River - Headwaters
73. Vermilion River
74. Rainy River - Rainy Lake
75. Rainy River - Black River
76. Little Fork River
77. Big Fork River
78. Rapid River
79. Rainy River - Baudette
80. Lake of the Woods
81. Upper Big Sioux River
82. Lower Big Sioux River
83. Rock River
84. Little Sioux River

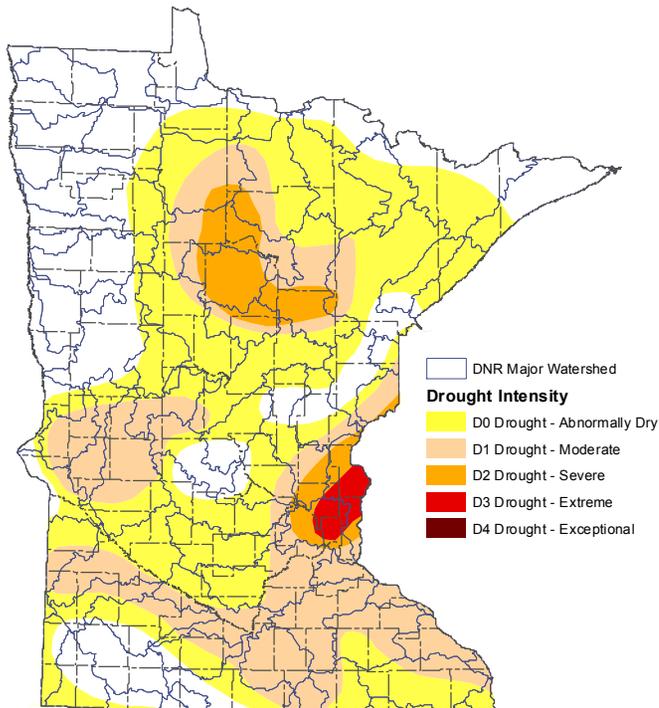
## Level 2 Hydrologic Unit (HUC4)

- |   |  |
|---|--|
|  Cedar River                     |  Missouri - Big Sioux Rivers    |
|  Des Moines River                |  Missouri - Little Sioux Rivers |
|  Lower Mississippi River         |  Rainy River                    |
|  Minnesota River                 |  Red River of the North         |
|  Mississippi - Upper Iowa Rivers |  St. Croix River                |
|  Mississippi River - Headwaters  |  Western Lake Superior          |

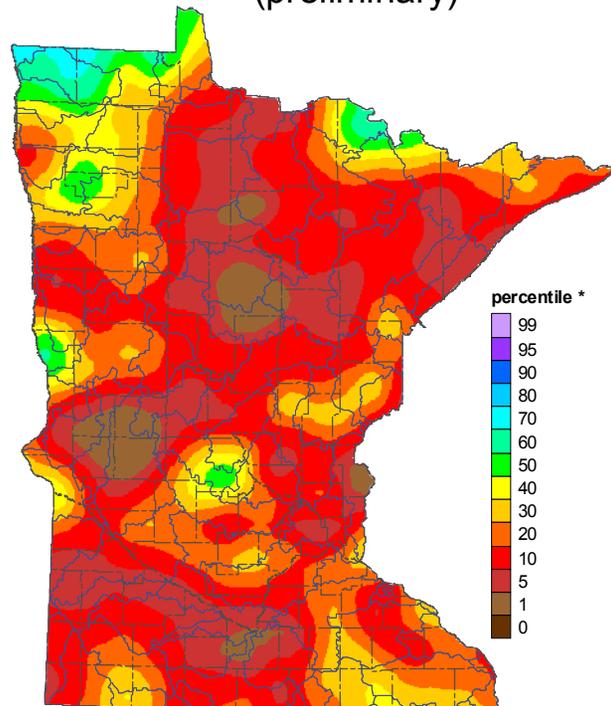


# Climatology

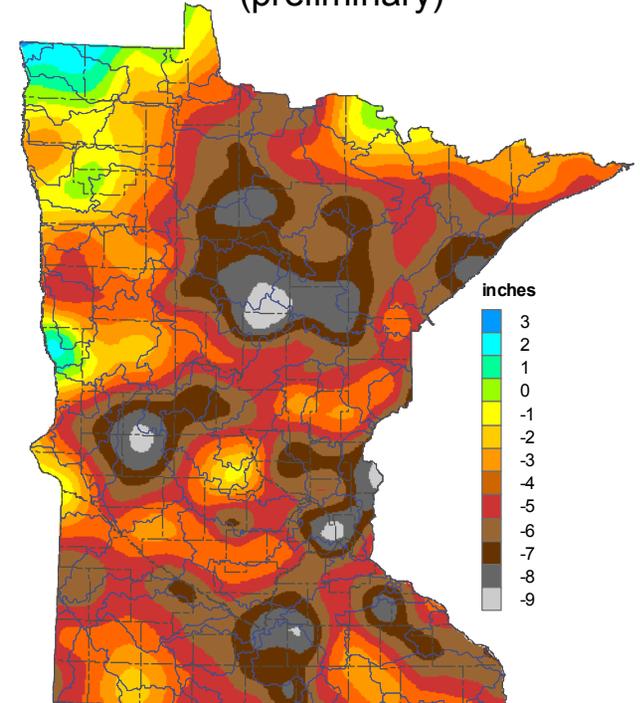
## U.S. Drought Monitor September 29, 2009



## Precipitation Ranking April 1, 2009 - September 28, 2009 (preliminary)

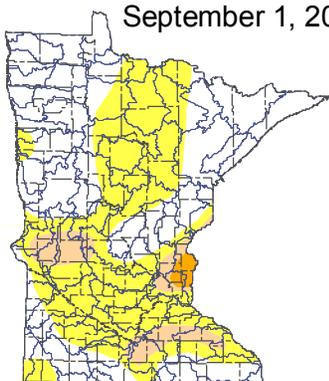


## Total Precipitation Departure from Normal April 1, 2009 - September 28, 2009 (preliminary)



State Climatology Office - DNR Waters

## September 1, 2009



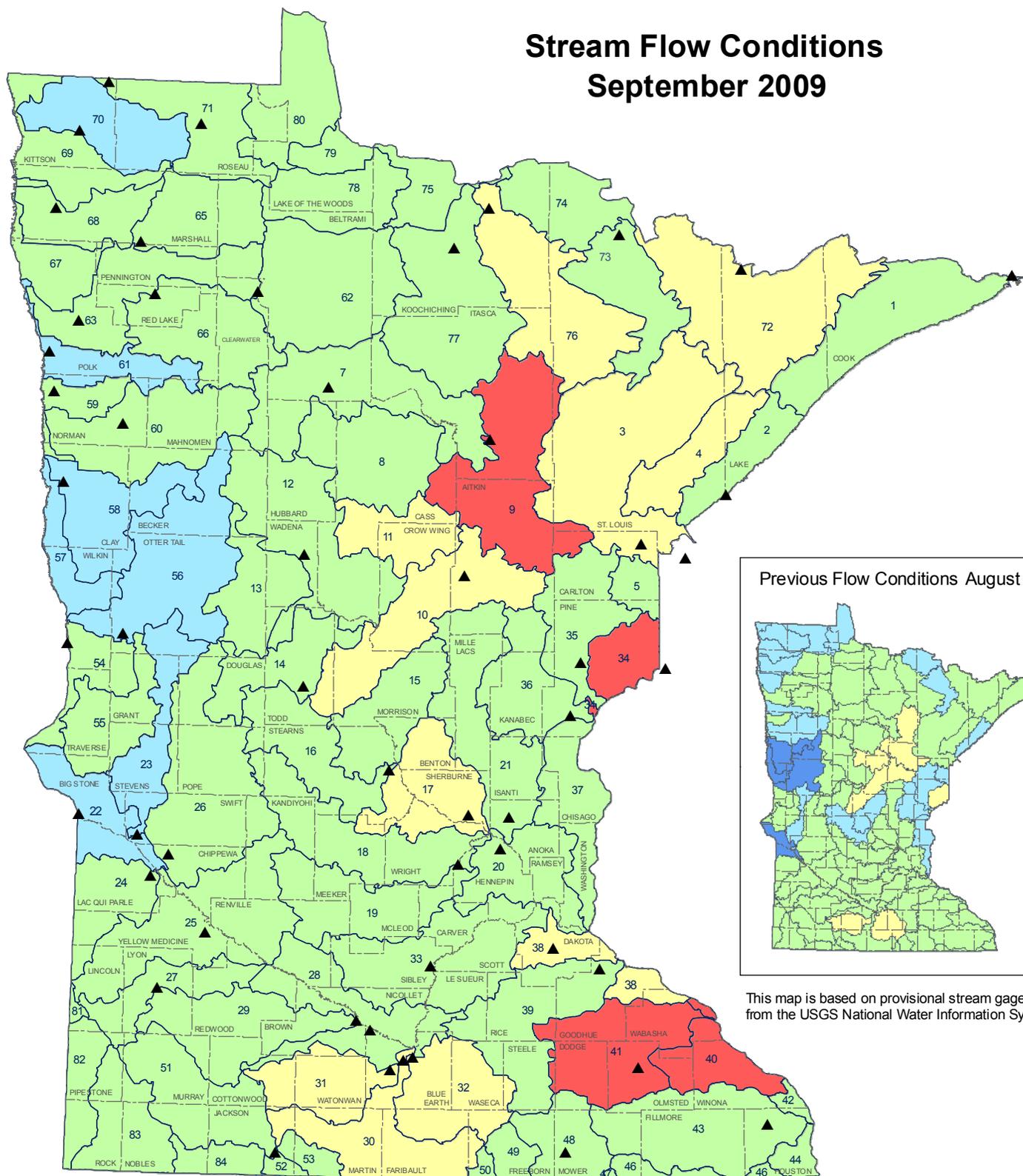
### Notes:

- September 2009 was one of the warmest and driest Septembers in the modern record.
- By late September, 30% of Minnesota's landscape was placed in "Moderate", "Severe", or "Extreme" drought categories by the U.S. Drought Monitor. In many counties, the 2009 growing season ranked among the 10 driest ever. Precipitation during the season fell short of normal by five or more inches in many locales.
- Large sections of the southern two-thirds of Minnesota received at least one inch of rain during the first few days of October. More early-October rainfall was expected as of this writing. Should the forecasts verify, significant improvements in the soil moisture situation are expected. Larger hydrologic systems will be slower to respond.

\* Percentile maps compare current-year seasonal rainfall totals with the long-term climate record. This percentile (ranking) statistic allows the season's rainfall totals to be described using historical context. A location ranked at zero means that the present-year seasonal rainfall total is the lowest found in the historical record; a ranking of 100 indicates the highest on record. A ranking at the 50th percentile (median) specifies that the present-year seasonal rainfall total is in the middle of the historical distribution.



## Stream Flow Conditions September 2009



Previous Flow Conditions August 2009

This map is based on provisional stream gage data from the USGS National Water Information System

\* Percentile ranking based on mean daily flows for the current month averaged and ranked with all historical mean daily flows for that month.

A watershed ranked at zero means that the present month flow is the lowest in the period of record; a ranking of 100 indicates the highest in the period of record.

A ranking at the 50th percentile (median) specifies that the present-month flow is in the middle of the historical distribution.

Data are current through 9/29/2009.

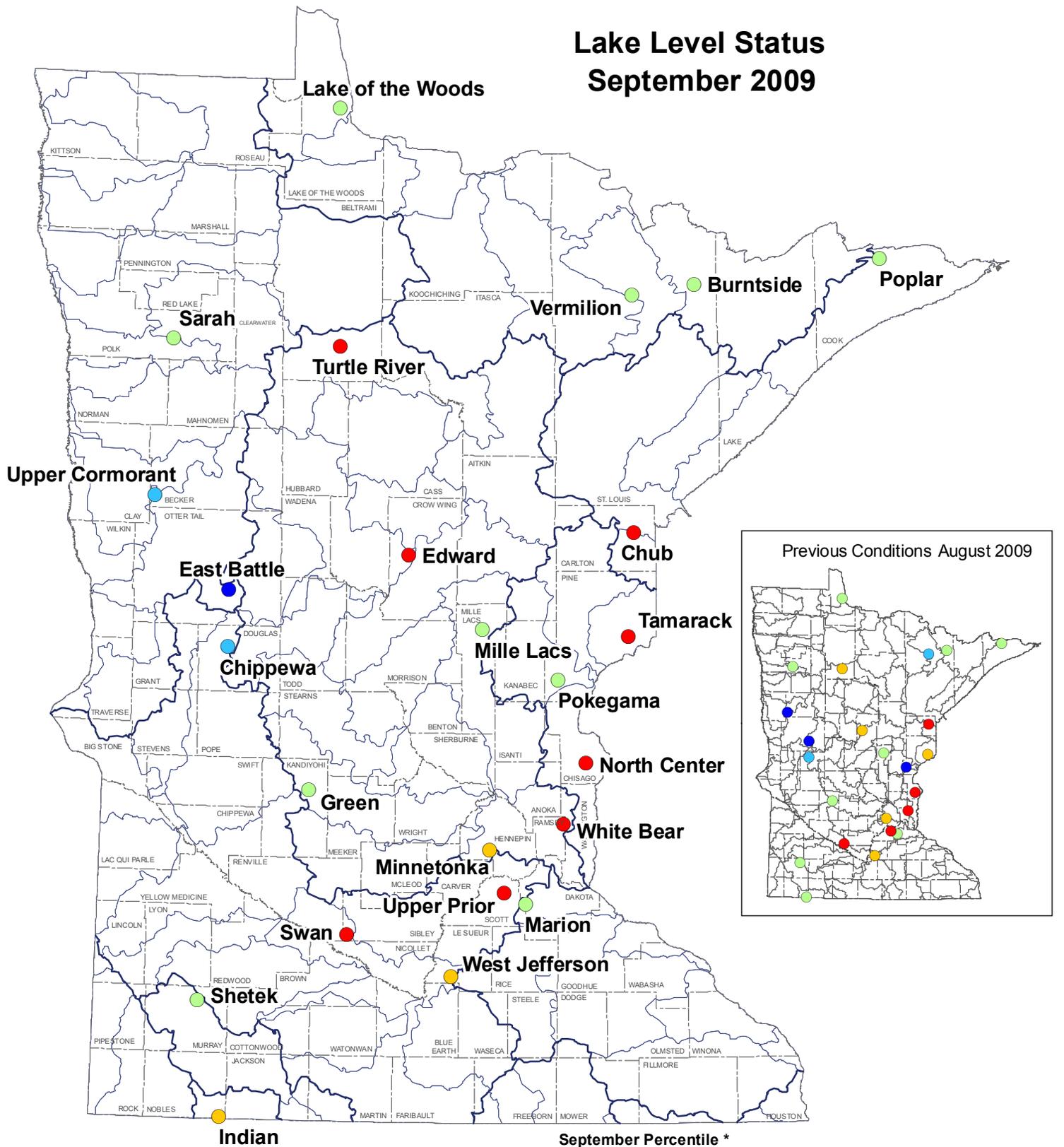
▲ Designated major watershed gage

### September Percentile \*

- High Flows (>90th percentile)
- Above Normal Flows (75 - 90th percentile)
- Normal Flows (25 - 75th percentile)
- Below Normal Flows (10 - 25th percentile)
- Low Flows (<= 10th percentile)



## Lake Level Status September 2009



\* Percentile ranking based on last reported reading for the current month compared to all historical reported levels for that month. A lake ranked at zero means that the present reported level is the lowest in the period of record; a ranking of 100 indicates the highest in the period of record. A ranking at the 50th percentile (median) specifies that the present-month reported lake level is in the middle of the historical distribution.

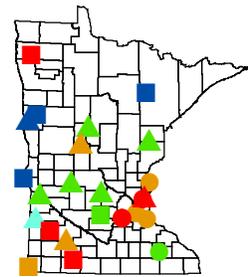
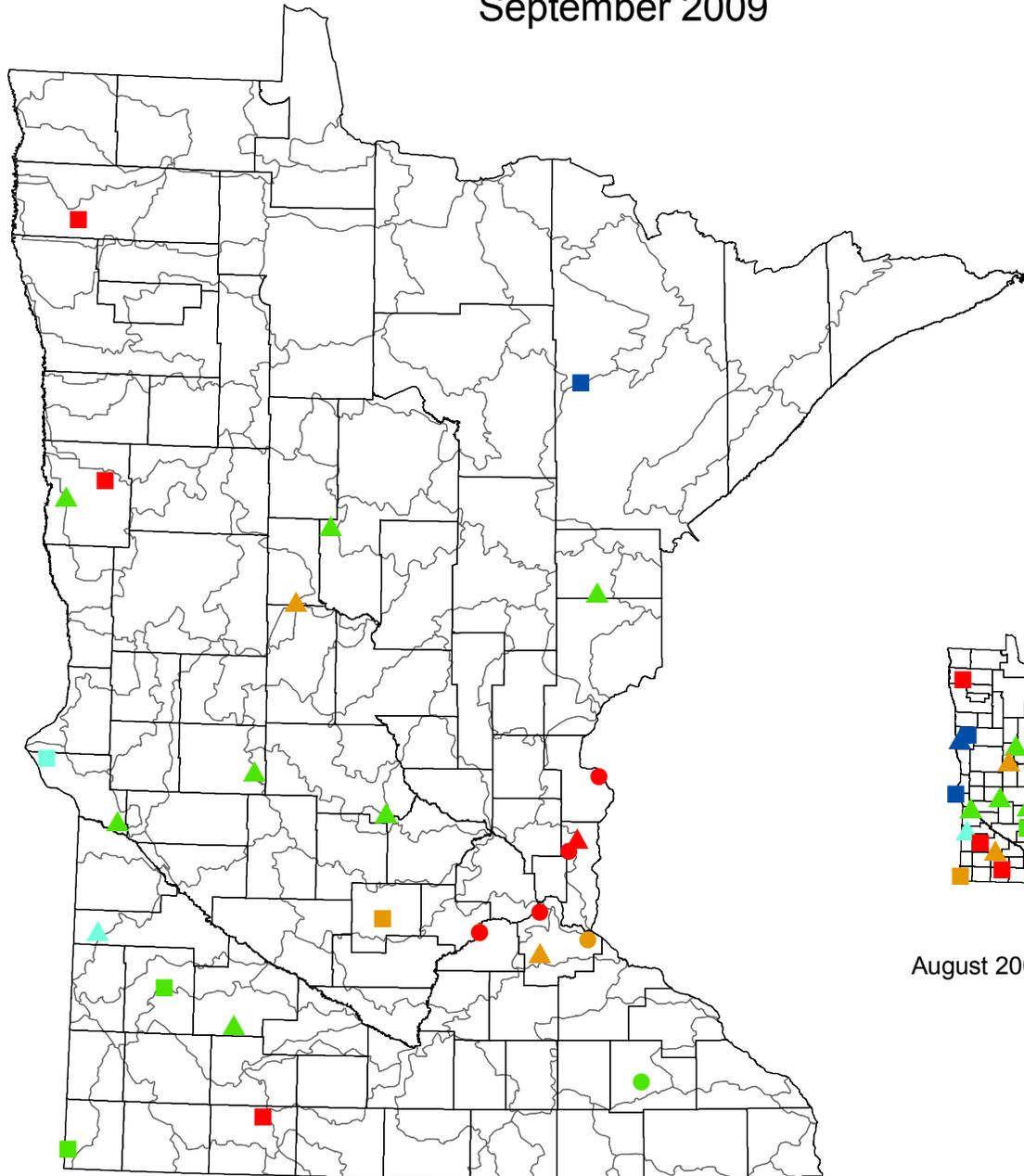
Data are current through 9/30/2009.  
Source data from: MN DNR Waters Lake Level Minnesota Monitoring Program

- September Percentile \***
- Low Water Levels (<= 10th percentile)
  - Below Normal Water Levels (10 - 25th percentile)
  - Normal Water Levels (25 - 75th percentile)
  - Above Normal Water Levels (75 - 90th percentile)
  - High Water Levels (>90th percentile)
  - Level 2 Hydrologic Unit
  - DNR Major Watershed



# Ground Water

## Ground Water Level Historical Rankings September 2009



August 2009 Indicator Wells

### Aquifer

- △ Water Table
- Buried Artesian
- Bedrock

### Water Level

- High Water Levels (> 90% percentile)
- Above Normal Water Levels (75% - 90% percentile)
- Normal Water Levels (25% - 75% percentile)
- Below Normal Water Levels (10% - 25% percentile)
- Low Water Levels (< 10% percentile)

\* Percentile ranking based on last reported reading for the current month compared to all historical reported levels for that month. A water level ranked at zero means that the present reported level is the lowest in the period of record; a ranking of 100 indicates the highest in the period of record.  
A ranking at the 50th percentile (median) specifies that the present-month reported water level level is in the middle of the historical distribution.

Source data from: MN DNR Ground Water Level Monitoring Program





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## Memorandum

**To:** Bassett Creek Watershed Management Commission  
**From:** Barr Engineering Company  
**Subject:** Item 5B – Request from City of Medicine Lake to Conduct Hydrologic/Hydraulic Analysis and Environmental Assessment of the Medicine Lake Dam at Bassett Creek  
BCWMC June 17, 2010 Meeting Agenda  
**Date:** June 9, 2010  
**Project:** 23270051 2010

### Recommended/requested Commission actions:

1. Prior to addressing the City's questions, direct the Commission Engineer to meet with the DNR regarding the City of Medicine Lake's desired modifications to the Medicine Lake dam/outlet and the associated technical issues that would need to be addressed.
2. Direct the Commission Engineer to report back to the Commission with an estimated cost to respond to the city's request and to address any additional DNR-identified concerns.

### Background

In a May 13, 2010 letter from the City of Medicine Lake, the city requested that the Commission "conduct a hydraulic and hydrologic performance evaluation and environmental assessment of the Bassett Creek dam at Medicine Lake" (i.e., the Medicine Lake outlet structure). The city wishes to learn if the dam releases water too quickly and if modifications to the structure are warranted. The city's concerns about low water levels in recent years are prompting this request.

The city's letter references the Commission Engineer's October 2009 memo in response to similar concerns expressed at that time by the Association of Medicine Lake Area Citizens (AMLAC).

The Medicine Lake outlet structure was replaced in 1996 as a joint project with the City of Plymouth, Hennepin County, MNDNR and the U.S. Army Corps of Engineers, with sponsorship by the BCWMC. The MDNR contributed \$50,000 to the cost of the project (50% of the construction cost).

The following paragraphs are excerpted from the October 2009 memo:

The Medicine Lake outlet/dam is located at the south end of the main basin of the lake, near South Shore Drive. The outlet/dam is 14 feet wide at the normal level; the structure discharges water from Medicine Lake directly to Bassett Creek. The outlet structure maintains the normal water elevation of Medicine Lake at approximately 887.7 feet (NGVD 29). (The normal water elevation is the elevation at which water will begin to flow out of the lake/over the control structure). The discharge (normal) elevation of the structure is approximately three feet above the level of the creek channel. The BCWMC, City of Plymouth, DNR and Hennepin County replaced the Medicine Lake outlet structure

because the old dam had deteriorated and was leaking severely, and because additional capacity was needed for flood flows.

The new/current structure was constructed to the same normal water elevation as the previous structure, as required by the DNR permit. The structure was designed to minimize seepage and other leakage from the structure. The “stepped” weir (outlet) of the current structure was designed and installed, in close coordination with the DNR, to address fisheries concerns and to minimize the duration of potential flooding during high flows...Modifying the outlet structure by reducing the width of the dam crest or installing a v-notch weir, would slow the release of water from the lake, and temporarily maintain higher water levels; however, it would also increase the flooding potential at several of the low homes around the lake. Any proposed modifications to the existing structure would require detailed analysis and approval from the DNR, BCWMC, the city of Plymouth, and the City of Medicine Lake to ensure changes do not increase flooding impacts.

In their May 13, 2010 letter, the City of Medicine Lake requested that the Commission answer a number of questions and that the Commission Engineer attend a future Medicine Lake City Council meeting to present an overview of the findings and to answer questions of attendees. It would take some effort to answer the questions posed by the city, and DNR permitting requirements would also need to be considered. Therefore, a meeting with the DNR is recommended to identify agency issues and concerns regarding modifications to the Medicine Lake outlet prior to answering the city’s questions. Depending on the feedback from the DNR, additional concerns and issues may need to be addressed beyond the questions posed by the city.

The following technical issues regarding modifications to the Medicine Lake outlet need to be discussed with the DNR:

1. The current stage/discharge relationship for the outlet (i.e., outflow rate at increasing elevations above the outflow elevation).
2. The impact on the regional (100-year) flood and smaller flood events.
3. The impact on the “normal” water level.
4. The ecological (e.g., plants, fish, wildlife) impacts.
5. The impact on the established ordinary high water elevation of Medicine Lake.

To analyze the above issues, the DNR may also want to know:

1. Historical information regarding the frequency and volume of outflow from the lake.
2. Historical information comparing the lake elevation/outflow to rainfall.

**Not Waive the Monetary Limits on Municipal Tort Liability.** Commissioner Black moved to approve the renewal of the BCWMC's liability coverage with the liability cap. Commissioner Elder seconded the motion. The motion carried unanimously with six votes in favor. [Cities of Minneapolis, Minnetonka, and Robbinsdale absent from vote].

## 5. New Business

- A. **General Mills Pedestrian Bridge: Golden Valley.** Ms. Chandler explained that the project is proposed by the City of Golden Valley and is located on the Main Stem of Bassett Creek and on General Mills property. She stated that the project includes the construction of a new pedestrian bridge approximately 100 feet upstream of a failing pedestrian bridge, which would be removed. She explained that the low elevation of the new bridge would not be in the floodplain but the project is coming before the Commission because work on the existing bridge, the new bridge, and trail modifications would occur in the floodplain. Ms. Chandler said the Commission Engineer recommends approval of the project.

Commissioner Langsdorf moved to approve the permit. Commissioner Black seconded the motion. The motion carried unanimously with six votes in favor [Cities of Minneapolis, Minnetonka, and Robbinsdale absent from vote].

- B. **Request from City of Medicine Lake to Conduct Hydrologic/ Hydraulic Analysis and Environmental Assessment of the Medicine Lake Dam at Bassett Creek.** Alternate Commissioner Hoshal reported that the City of Medicine Lake City Council wanted to investigate issues regarding the lake level of Medicine Lake beyond the previous information provided by the BCWMC through its Commission Engineer. He summarized the three possibilities that the City proposed. Alternate Commissioner Hoshal explained that the City of Medicine Lake is asking the BCWMC to consider and respond to the City as to what action the BCWMC is willing to do to satisfy the Medicine Lake City Council, members of the Association of Medicine Lake Area Citizens (AMLAC), and residents of the City of Plymouth regarding the water level of Medicine Lake.

Commissioner Black asked Alternate Commissioner Hoshal what value there would be in collecting more data on the water flow and rate out of the lake. Alternate Commissioner Hoshal responded that the data would help develop and support a City response to inquiries from residents about the water level of the lake. Administrator Nash commented that the cost of installing a transducer to collect data would likely be less than \$1,000. Ms. Chandler remarked that Barr Engineering could provide an approximate answer to the City's questions regarding how much water is flowing out of Medicine Lake and how often if Barr utilized data already collected but the data may not be as comprehensive as what the City is requesting.

Mr. Mathisen commented that the level of a lake is set by the Department of Natural Resources (DNR) for various reasons and that there is only so much bounce in a lake before low properties are flooded out. He remarked that perhaps the issue is a public education issue.

Alternate Commissioner Hoshal said it would be helpful to have someone from the Commission to come meet with the Medicine Lake City Council.

Commissioner Black moved to approve the direction to the Commission Engineer to attend a meeting of the Medicine Lake City Council and to be prepared to provide ballpark costs of different actions. Commissioner Elder seconded the motion. The motion carried unanimously with five votes in favor [City of Medicine Lake abstained from the vote. Cities of Minneapolis, Minnetonka, and Robbinsdale absent from vote]. Commissioner Black requested that she get notified of the date of the City Council meeting that the Engineer will be attending. Commissioner

Elder recommended that the responsibility should be on the City of Medicine Lake to bring the issue in front of the Commission again if the City so chooses. Alternate Commissioner Ted Hoshal volunteered to contact Commission Engineer Karen Chandler and Commissioner Black regarding the date of the City of Medicine Lake's City Council meeting.

## 6. Old Business

A. **Medicine Lake Local Water Management Plan.** Ms. Chandler commented that she reviewed the Plan and compared it with the BCWMC's requirements. She said that her memo included in the meeting packet provides the details of the review. She explained that the items listed in bold font were the items that the BCWMC either requires or recommends that the City revise. Ms. Chandler said that page one of the memo includes a summary of the three most significant issues:

- The need for a discussion of structures located within the FEMA floodplain
- Clarification of the review/permitting roles of the City and BCWMC, including references to the BCWMC's *Requirements for Improvements and Development Proposals*.
- The need for the City to develop an erosion and sediment control ordinance or to incorporate similar controls into other City ordinances.

Ms. Chandler reported that she sent a draft of the review to the consultant preparing the Plan for the City of Medicine Lake. She reported that the consultant responded that all of the issues raised by the BCWMC could be addressed.

Chair Loomis stated that Commissioner Harper-Lore had conveyed a concern regarding the City's lack of an erosion and sediment control ordinance and would like the Commission to find out where the City is in its process to develop such an ordinance. Alternate Commissioner Hoshal said that the City would certainly be able to investigate and follow up on that issue. Commissioner Black moved to forward the comments prepared by the Commission Engineer regarding the City of Medicine Lake's LWMP to the City and to communicate that the BCWMC would like the City to develop an erosion and sediment control ordinance by sometime in 2011. Commissioner Elder seconded the motion. Alternate Commissioner Hoshal remarked that on item 17 in the memo there should be a reference to both 100-year floodplain elevations. Ms. Chandler said that the Commission Engineer would make that change. The motion carried unanimously with six votes in favor [Cities of Minneapolis, Minnetonka, and Robbinsdale absent from vote].

B. **Weir on Sweeney Lake.** Ms. Chandler reported that the BCWMC received a letter from the Department of Natural Resources (DNR) regarding what work could and could not take place at the weir without a DNR permit. She said that Commission staff and City of Golden Valley staff will meet next week to discuss what should be done with the outlet.

[Commissioner Welch arrived.]

C. **Approval of BCWMC's Draft 2011 Budget.** Commissioner Welch directed Ms. Chandler to follow up with Sue Virnig regarding the financial recording of a disbursement to the City of Plymouth in March 2009 from the Channel Maintenance Fund. Ms. Langsdorf reported that the Education Committee requested a revision to the Budget and Levy narrative to reflect the division of the funds budgeted for the BCWMC's participation in the West Metro Watershed Alliance's (WMWA) project costs versus administrative costs. She said the correct budget figure for the BCWMC's 2011 portion of WMWA's administrative costs is \$2,000 and is part of the BCWMC's Watershed Education Partnerships budget. She said the correct budget figure for the BCWMC's 2011 portion of the WMWA's project costs is \$1,000 and is part of the BCWMC's Education and Public Outreach budget. Ms. Chandler requested the removal of the footnotes in the 2009 and 2010 columns. Commissioner Welch moved to approve the budget and the budget and levy

## Memorandum

**To:** Bassett Creek Watershed Commission  
**From:** Barr Engineering Co.  
**Subject:** Item 7B—Meeting with the City of Medicine Lake regarding the Request by the City to Conduct Hydrologic/Hydraulic Analysis and Environmental Assessment of the Medicine Lake Dam at Bassett Creek  
BCWMC August 19, 2010 Meeting Agenda  
**Date:** August 9, 2010  
**Project:** 23/27-0051.2010

### **7B. City of Medicine Lake Hydrologic/Hydraulic Analysis and Environmental Assessment of the Medicine Lake Dam at Bassett Creek**

#### **Recommended/requested Commission actions:**

Refer the issue posed by the request from the City of Medicine Lake to the TAC and request that they develop a recommended strategy for consideration by the Commission for responding to the technical issues. Direct the Commission Engineer to report back to the Commission with an estimated cost to implement the strategy recommended by the TAC.

#### **Background**

At the June 17, 2020 Commission meeting the Commission authorized the Engineer to attend the August 2, 2010 meeting of the Medicine Lake City Council to discuss their request to evaluate whether the Medicine Lake Dam that was constructed in 1996 releases water too quickly and if modifications to the structure are warranted. The City's concerns about low water levels in recent years on behalf of lakeshore homeowners who are having difficulty accessing the lake are prompting this request. Similar concerns were expressed in 2009 by the Association of Medicine Lake Area Citizens (AMLAC).

About 40 people were in attendance at the meeting including Plymouth Commissioner Virginia Black, New Hope Commissioner John Elder, and Medicine Lake Alternate Commissioner Ted Hoshal. It was noted that residents from both Medicine Lake and Plymouth were in attendance. The consensus of the people that spoke at the meeting was that a study of the issue was warranted and that the Commission should consider conducting the study. The issues are:

- A review of lake levels indicates that they follow precipitation patterns. When precipitation is below normal for long periods of time, the lake level drops below the top of the dam. Lake levels

**To:** Bassett Creek Watershed Management Commission  
**From:** Barr Engineering Co.  
**Subject:** Item 7B—Meeting with the City of Medicine Lake regarding the Request by the City to Conduct Hydrologic/Hydraulic Analysis and Environmental Assessment of the Medicine Lake Dam at Bassett Creek BCWMC August 19, 2010 Meeting Agenda  
**Date:** August 9, 2010  
**Page:** 2  
**Project:** 2327-0051.2010

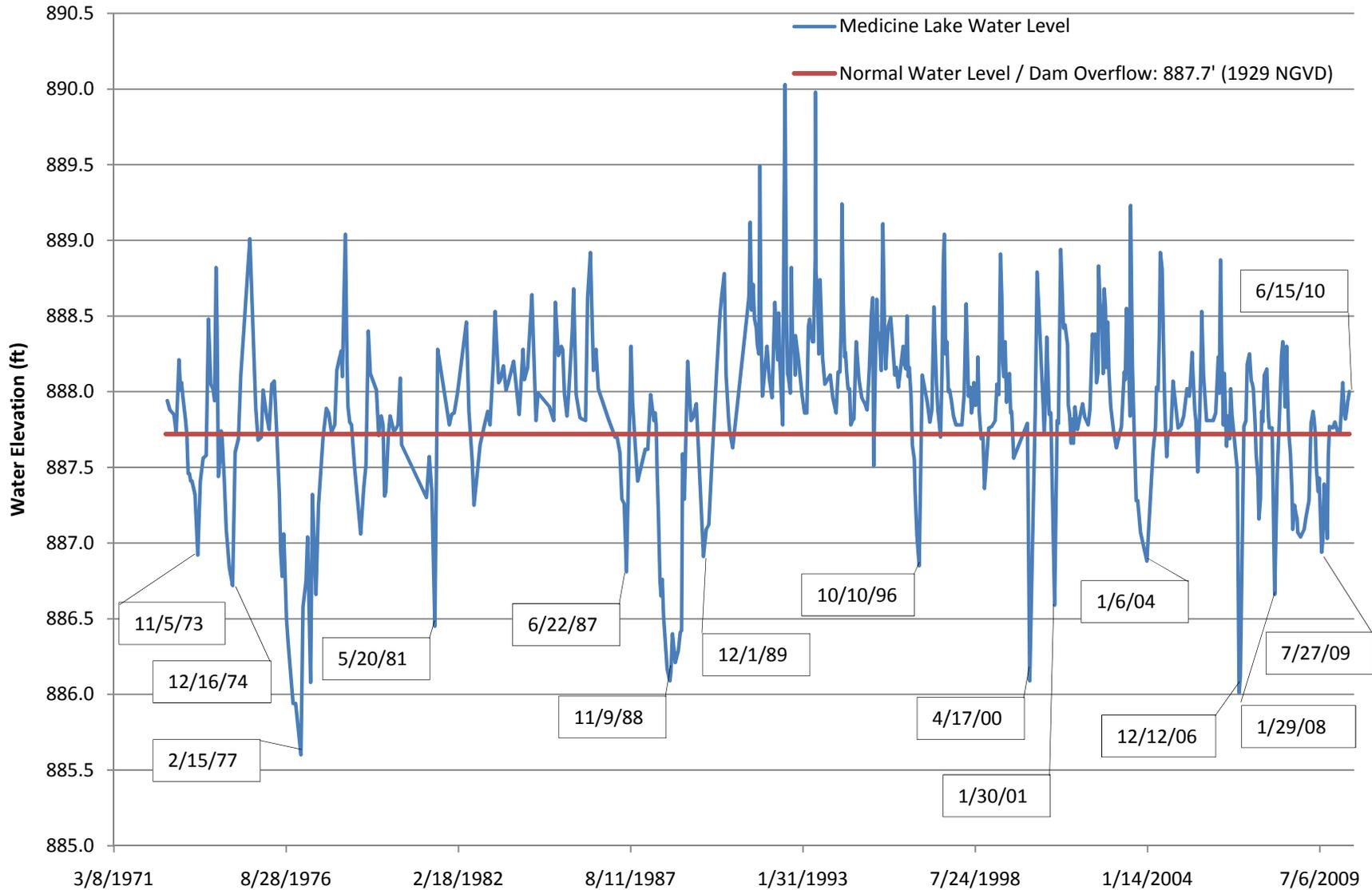
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were low for much longer periods of time in the late 1970s and late 1980s than they have been in recent years because of longer periods of below normal precipitation during the 70s and 80s.

- The dam was replaced because the old structure was in poor condition and leaked excessively and because additional discharge capacity was also needed to protect several low residential structures around the lake. At the time the dam was replaced there were several homes with first floors lower than the 100-year flood level. An increase in the normal level of the lake would increase the flood level and could threaten any low homes. If an increase in the normal water level is considered a new survey of properties around the lake would need to be conducted.
- The existing dam has the same control elevation (887.7) as the old structure and the discharge from the lake is the same to the 10-year elevation (889) as it was with the old structure. When the lake is above elevation 889 the discharge is greater that it was with the old structure. The watershed model could be used to compare the water levels for various events with the old structure and the existing structure to respond to the question of whether the existing structure is releasing water too quickly. The model could also be used to predict water levels that would occur with a variety of modifications to the existing structure. Increases in the normal level or altering the discharge capacity could likely raise the flood level and require flood proofing of the low homes.
- An increase in the normal level of the lake would require a flowage easement from all properties around the lake affected by the increase. The easement would likely be required to the new 100-year flood level.
- Other options to improve lake access during periods of low lake levels would include providing augmentation from another water source to raise water levels such as upstream reservoirs or dredging channels from the shoreline to deeper waters.
- Raising the normal level of the lake would change the normal ordinary high water level or elevation where the vegetation around the lake changes from predominately aquatic to predominately upland. There would likely be more wetland and more fisheries habitat around the lake.

Three handouts were distributed at the meeting including a graph of Medicine Lake water levels for the period 1972 through 2010, a graph of annual precipitation for the period 1980 through 2009, and an elevation discharge curve that had a rating curve for the old dam and the existing dam. Copies of the handouts are attached.

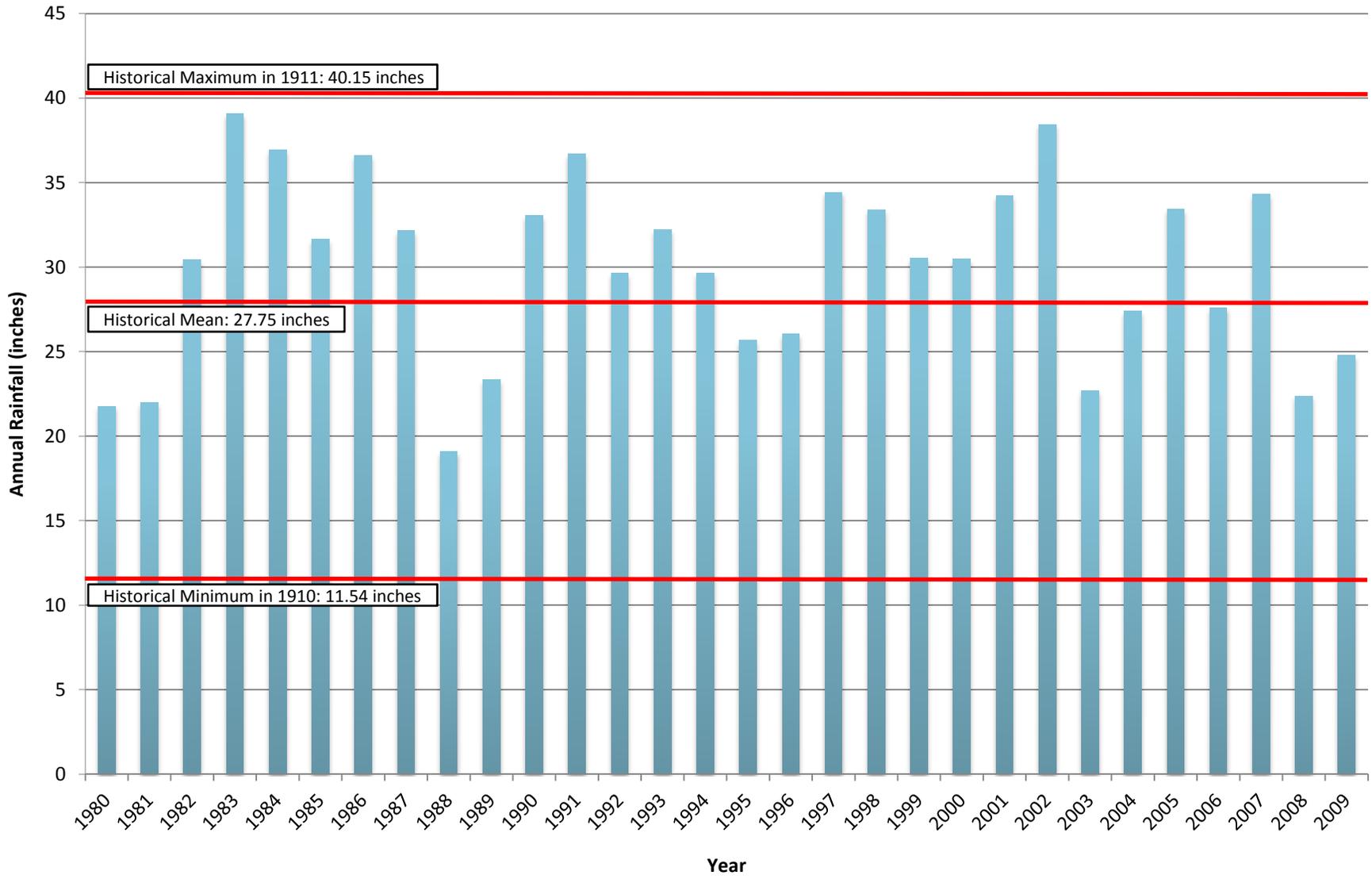
# Medicine Lake Water Levels 1972-2010



# Annual Rainfall

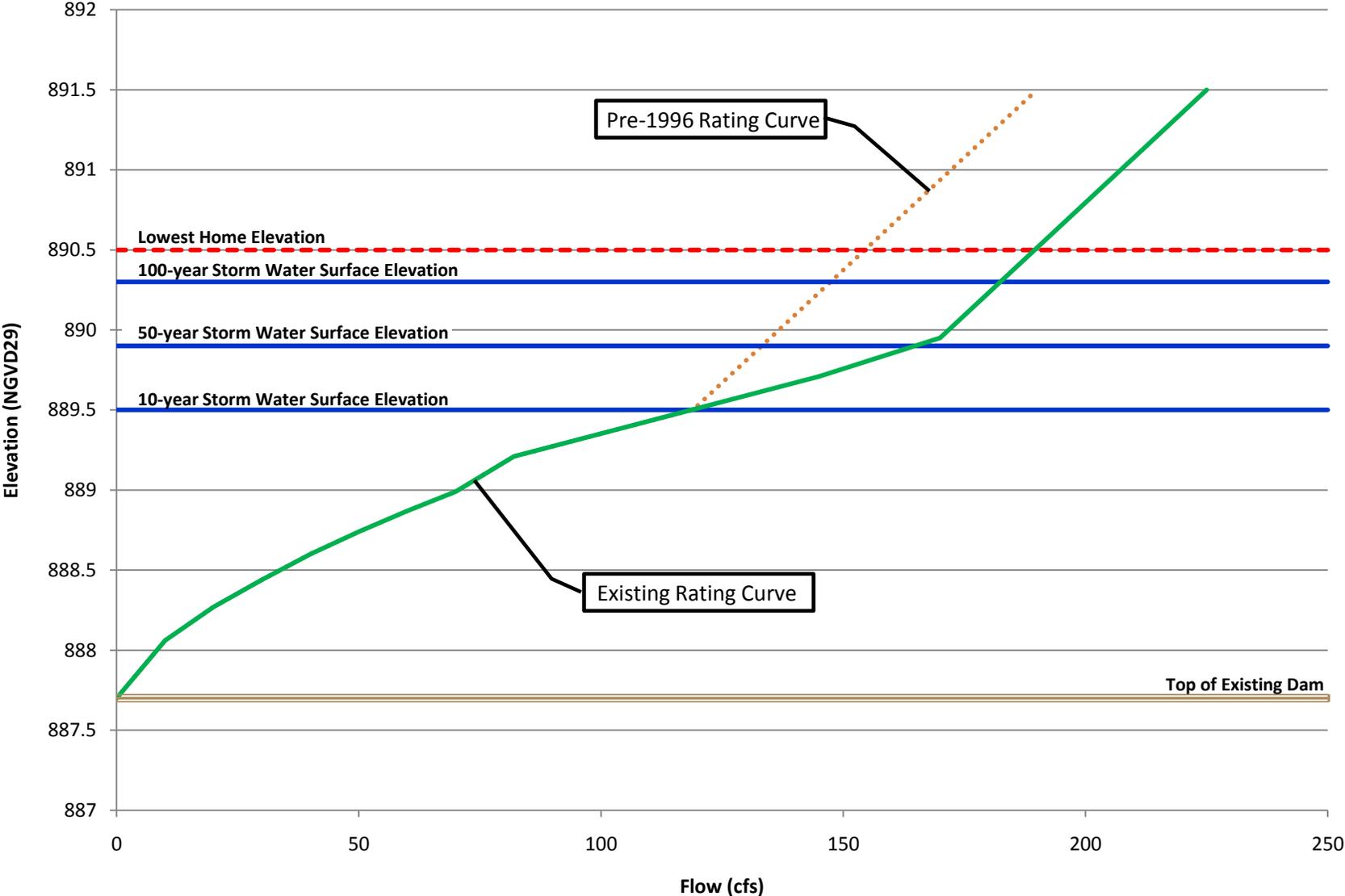
## Twin Cities Metro Area 1980-2009

August 2, 2010



# Medicine Lake Dam Rating Curve

August 2, 2010



funding for the Wirth Lake outlet structure project in addition to the two restoration projects. Commissioner Harper-Lore seconded the motion. The motion carried unanimously with nine votes in favor.

- B. **Medicine Lake Outlet.** Mr. Kremer reported that he attended the August 2<sup>nd</sup> Medicine Lake City Council meeting to discuss the City's request that the Commission investigate whether the Medicine Lake Dam releases water too quickly. Mr. Kremer said that the concerns expressed included that some people were having a hard time accessing parts of the lake requiring some residents to build out their docks to reach deeper water. Mr. Kremer said that the structure was designed and built so that for all flows less than the ten-year level the water levels are about the same as prior to the construction, meaning that modification has not affected water flow. Mr. Kremer explained that the issues with modifying the outlet structure are detailed in the memo in the meeting packet. He said that one of the most significant problems with modifying the ten-year flood level is the easement issue and that action to modify the level would require the securing of an easement from each property owner.

He said the Commission Engineer's recommendation is for the Commission to forward the issue to the TAC to review and develop recommended strategies responding to the technical issues.

Commissioner Elder reported that he also attended the council meeting and that there was a strong push from those people in attendance that the Commission dredge Medicine Lake. Mr. Kremer commented that the Commission did investigate adding to its CIP a project to dredge Medicine Lake that would improve water quality and provide better access to the lake. He said that the Commission asked the TAC to get more information from a contractor and ultimately the TAC recommended that the project not be considered by the Commission. Commissioner Black commented that the data clearly indicates that the times in which the residents are experiencing problems with the water levels are the times of drought and that she would be hesitant to change the outlet due to the potential issues for flooding. Chair Loomis said she feels it would be irresponsible for the Commission to raise the flood level of the lake.

Commissioner Harper-Lore moved to not forward the issue to the TAC. Commissioner Black seconded the motion and added the friendly amendment for the Administrator to draft a response letter to the City of Medicine Lake to communicate the Commission's findings. The motion carries with eight votes in favor and one vote against [City of Medicine Lake].

- C. **Sweeney Lake Outlet.** Mr. Kremer reported that at the July meeting the Commission requested additional information about right of way for the structure and Commission responsibility for replacement of the structure. He indicated that the City of Golden Valley owns the property that the current structure is on and the area is big enough to accommodate the new structure that would be built and no additional easements would be needed. He stated that the detailed information regarding Commission responsibility for the structure was in the memo from the Engineer included in the meeting packet. He also reported that the Commission Engineer contacted the DNR to find out what it would want in a letter requesting funding for the project from the Dam Safety Program. Commissioner Black moved to approve staff's recommendation that the TAC review the project, its prioritization, and project schedule as part of the annual CIP review and to authorize staff to prepare a letter to the Minnesota DNR requesting funding assistance from the Minnesota Dam Safety Program for construction of a new Sweeney Lake outlet structure. Commissioner Langsdorf seconded the motion. The motion carried unanimously with nine votes in favor.
- D. **E. Coli Monitoring.** Mr. Kremer stated that the Commission received a memo in the meeting packet summarizing the E. coli monitoring done cooperatively with the MPCA from 2008 to June 2010. He said there were six sites sampled along Bassett Creek, including four sites on the Main



# AMLAC

**Association of  
Medicine Lake Area Citizens**

[www.amlac.org](http://www.amlac.org)

email: [amlac@q.com](mailto:amlac@q.com)

Nov 8, 2011

Dear Bassett Creek Watershed Management Commission:

The Association of Medicine Lake Area Citizens needs your help.

**BACKGROUND:** In July 2010, the Bassett Creek Watershed Management Commission presented information at a community meeting at the Medicine Lake City Hall regarding the dam at the outflow of Medicine Lake to Bassett Creek. While there were a number of citizens who came to the meeting, not everyone was there and we continue to receive questions about the dam structure. We find ourselves getting community pressure to increase the level of the lake.

**REQUEST:** We are asking the Commission to use the information presented in that meeting and create a document that addresses the issues in a factual manner. The document can be broadcast through AMLAC's communication channels and would, we feel, greatly help in reducing community pressure on the dam issue.

The most commonly-asked **QUESTIONS** include:

1. The AMLAC Board is questioned with "Could the level of the lake be higher and the dam changed to hold more water in the lake?" The Commission was first a flood control organization and now part of its mission is improving surface water quality. Can it be both flood control and usable recreation?
2. *Can more water be held back without putting homes at risk for flooding during large rain events using an adjustable spillway?* Would a change in the dam design help lake levels significantly during drought periods? We can all see that the edge of the water now is not even close to flowing into Bassett Creek.
3. Is there a liability issue for the BCWMC if the dam is changed and flooding occurs?
4. Does holding more water in the lake put the lake at risk for anything negative, such as more erosion or poor water quality?
5. Which homes are in the flood zone and could they be flood-proofed? Does flood-proofing necessarily mean a wall blocking the view from the home?

6. What are the dollar costs for changing the dam structure and potential flood proofing of affected homes?
7. Could you please provide us with the graphs on rainfall and evaporation and the description of the effects? Please address the concept of “bounce.”
8. Are the wet detention ponds providing flood control?
9. How do the size and development (impervious surface) of our watershed affect the volume of water coming into the lake?

Are there other risks, costs or benefits we should be aware of? There may also have been parts of Len Kremer’s presentation (at the community meeting in July 2010) about which we’ve forgotten to ask.

If there are other pieces that can help educate our residents, we will appreciate the whole picture. Any information you give us can be disseminated through AMLAC’s communication channels to your constituents.

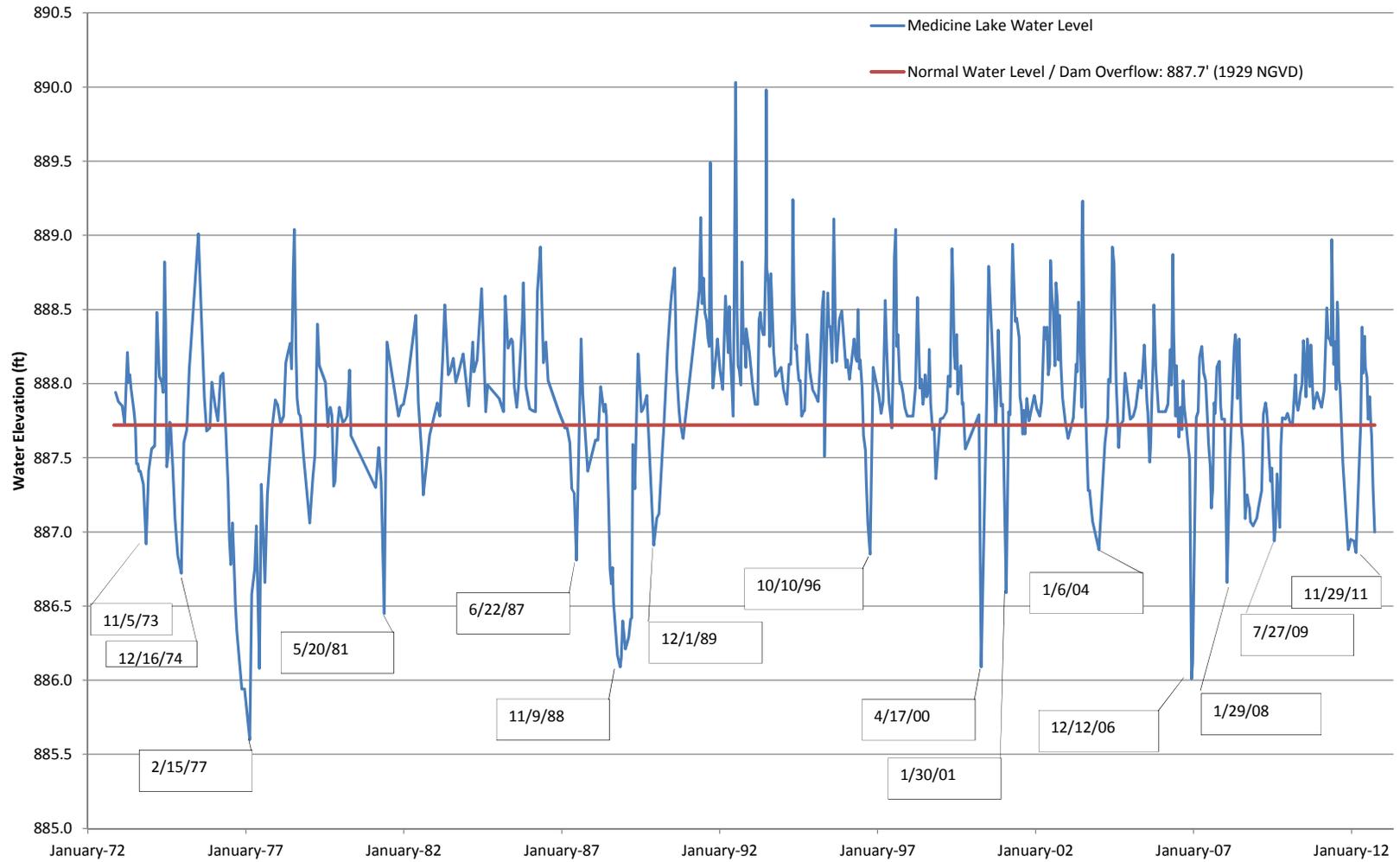
Thank you very much for your assistance.

***From the AMLAC Board of Directors:***

Terrie Christian	Karen Berge	Kevin Christian	Bill Wixon
Holly Martin	Kip Leonard	Julie Rumsey	Diane Hulke
Jim Goetz	Graham Spall	Gary Holter	Tom Gallagher

*AMLAC’s scope stretches to over 500 households in the Medicine Lake area.*

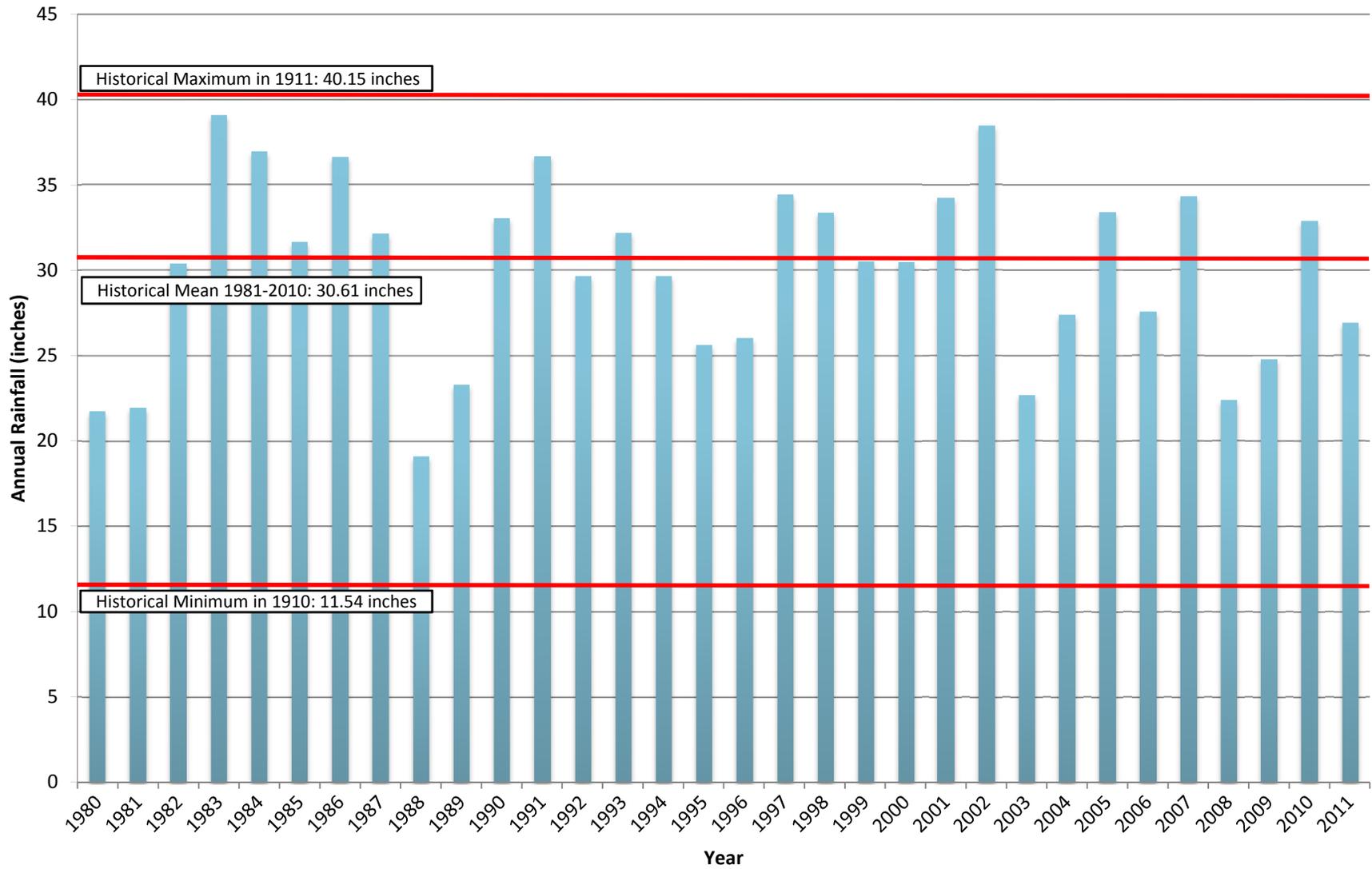
# Medicine Lake Water Levels 1972-2012



# Annual Rainfall

## Twin Cities Metro Area 1980-2011

October 8th, 2012



## Karen Chandler

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**From:** Derek Asche <DAsche@plymouthmn.gov>  
**Sent:** Friday, August 24, 2012 1:29 PM  
**To:** Jim Herbert; Karen Chandler  
**Cc:** Ginny Black  
**Subject:** Medicine Lake Dam  
**Attachments:** 1995 HENN CO COST SHARING MED LK DAN 2011049.pdf

Jim and Karen,

Please see the final article in the attached agreement regarding the ownership and responsible party for the Medicine Lake Dam. It appears the responsibility for the Dam rests with Hennepin County.

Thanks,

Derek

Agreement No. A08705  
County of Hennepin and  
City of Plymouth

**AGREEMENT FOR COST SHARING**

This Agreement, made and entered into this \_\_\_\_ day of \_\_\_\_\_, 1995, between the County of Hennepin through its Department of Public Works, Environmental Management Division, 417 North Fifth Street, Minneapolis, Minnesota, 55401-1309 (hereinafter referred to as "County") and the City of Plymouth, 3400 Plymouth Boulevard, Plymouth, Minnesota 55447 (hereinafter referred to as "City"); and

WHEREAS, the Medicine Lake Dam, located on Bassett Creek in Section 25, Township 118 North, Range 22 West, at the outlet of Medicine Lake in Plymouth, Minnesota (hereinafter referred to as the "Dam") is owned, operated, and maintained by the County; and

WHEREAS, the Minnesota Department of Natural Resources (hereinafter referred to as the "DNR") has inspected the Dam and determined that it is in need of repair or replacement and that it is in the public interest to repair or reconstruct the Dam; and

WHEREAS, it has been determined that it is prudent to replace or reconstruct rather than repair the Dam and that replacement will cost approximately \$138,000; and

WHEREAS, the DNR has funds available to repair and reconstruct dams and has determined it to be in the public interest to grant Hennepin County funds in the amount of \$50,000 to replace the Dam; and

WHEREAS, the Bassett Creek Water Management Commission (hereinafter referred to as the "Commission") has agreed to provide funds in the amount of \$58,000 for the County and the City to work together to contract for the replacement of the Dam;

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, it is hereby agreed as follows:

**ARTICLE I  
Undertaking by the County**

(1) The County agrees to apply to the DNR for grant funds in the amount of \$50,000 for the purpose of replacing the Dam and, if the DNR provides such funds to the County, the County will make those funds available to the City within a reasonable time after their receipt by the County. It is specifically agreed that if the County does not receive grant funds from the DNR it shall have no obligation to provide the \$50,000 contemplated by this paragraph. It is specifically understood that under the terms of the County's grant agreement with the DNR, a copy of which is attached hereto as Exhibit A,

these funds will not be made available until after construction has been completed and approved by the State.

(2) The County agrees to provide up to a maximum of \$30,000 of County funds to reimburse the City for certain costs it incurs for the replacement of the dam. It is specifically agreed that these County funds shall be used for the purposes of construction, acquisition of necessary easements and right-of-way and for the purpose of administration of all areas of the project, including legal issues and execution of contracts. The County will make these funds available to the City when the County, in its sole discretion, determines that construction of the new Dam is 50% complete.

(3) The County reserves the right to review all plans and contracts and to inspect the construction of the dam on an ongoing basis.

## ARTICLE II Undertakings by the City

(1) The City agrees that, through its own employees or through contracting with others, it shall perform all tasks required to construct the new Dam. This includes, but is not limited to, administration of the project; legal issues and execution of contracts; preparation of plans and specifications by the State approved registered professional engineer; obtaining approval of the plans and specifications by the Commissioner of Natural Resources prior to start of construction; applying for, obtaining, and complying with all necessary governmental permits including a water permit which must be issued by the DNR in accordance with Minnesota Statute 103G.301 prior to the start of construction; preparation of a work plan and obtaining State approval for such work plan; obtaining soil boring; acquisition of necessary easements and right-of-way; legal issues and execution of contracts; submission to the DNR of documentation of costs and payments; construction engineering; all aspects of bidding for the work and construction of the Dam; all contracting with persons for construction; demolition and removal of the old Dam; all aspects of construction of the new Dam; restoration of the area after demolition and construction.

(2) The City agrees that it will undertake all of the obligations and fulfill all of the responsibilities assumed by the County in "Section III SPECIAL PROVISION" of its Dam Safety Grant Agreement with the DNR, set forth in the attached Exhibit A, as though those obligations and responsibilities were set forth fully herein.

(3) The City agrees that it will provide documentation to the County of all its costs and expenses associated with its acquisition of necessary easements and right-of-way and legal administration at the time the County determines the project to be 50% complete and at the conclusion of the project.

(4) The City agrees that it will deal with the Commission in obtaining the funding committed to the new Dam project by the Commission.

(5) The City agrees to be responsible for all cost incurred over the estimated cost of \$138,000

### ARTICLE III Term

This Agreement shall be in full force and effect from September 12, 1995 through July 31, 1996.

### ARTICLE IV Hold Harmless Agreement

The city agrees to defend, indemnify, and hold harmless the County, its elected officials, officers, agents, volunteers, and employees from any liability, claims, causes of action, judgments, damages, losses, costs, or expenses, including reasonable attorney's fees, resulting directly or indirectly from any act or omission of the City, its subcontractors, anyone directly or indirectly employed by them, and/or anyone for whose acts and/or omissions they may be liable in the performance of the services required by this contract, and against all loss by reason of the failure of the City to perform fully, in any respect, all obligations under this agreement.

Consistent with the specific limits, exclusions, and conditions expressed in Minnesota Statutes, Chapter 466, (as may be amended from time to time) the County does hereby hold the City, its officers, agents, employees and contractors harmless from any liability, claims, damages, costs, judgements, or expenses, including reasonable attorneys' fees to the extent and degree such liability arises out of the negligence of the County, its employees or agents.

### ARTICLE V Insurance

The City shall obtain and maintain, at all times during the Term of this Agreement, a fidelity bond in an amount not less than \$100,000 for each person covering the activities of all persons authorized to receive or distribute monies. Written verification of such bond shall be furnished to the County, prior to the execution of this Agreement.

In order to protect the City and those listed above under the indemnification provisions, the City agrees at all times during the term of this Agreement, and beyond such term when so required, to have and keep in force insurance as follows:

#### Limits

1. Commercial General Liability with the following coverages. Contractual Liability coverage must be included.

General Aggregate	\$1,000,000
Products - Completed Operations Aggregate	\$1,000,000
Each Occurrence - Combined Bodily Injury and Property Damage	\$1,000,000
Fire Damage - Any One Fire	\$500,000
2. Automobile Liability - combined single limit per occurrence coverage for bodily injury and property damage. Owned, non-owned, and hired automobiles must be included.	\$1,000,000
3. Workers Compensation and Employers Liability:	
a. Workers Compensation.	Statutory
If the contractor is based outside the State of Minnesota, coverage must apply to Minnesota laws.	
b. Employers Liability. Bodily injury by:	
Accident - Each Accident	\$100,000
Disease - Policy Limit	\$500,000
Disease - Each Employee	\$100,000

The above establishes minimum insurance requirements. It is the sole responsibility of the City to determine the need for and to procure additional coverage which may be needed in connection with this contract. All insurance policies shall be open to inspection by the County, and copies of policies shall be submitted to the County upon written request.

The City shall not commence work until it has obtained required insurance and filed an acceptable Certificate of Insurance with the County. The certificate shall:

- Name Hennepin County as certificate holder and as an additional insured with respect to operations covered under the contract, for all liability coverages, except Workers Compensation and Employers Liability, and, if applicable, Professional Liability.
- List any exceptions to the insurance requirements.
- Be amended to (1) show that Hennepin County will receive thirty (30) days written notice in the event of cancellation, non-renewal, or material change in any described policies, and (2) delete the following or similar wording: "Endeavor to" and "but failure to provide such written notice shall impose no obligation or liability of any kind upon the company, its agents, or representatives".

The City agrees that any contract let by the City or its agents for the performance of work on the Dam shall include clauses that will:

(1) Require the contractor to defend, indemnify, and save harmless the City and the County, their elected officials, officers, agents, volunteers and employees from any liability, claims, causes of action, losses, demands, damages, judgments, costs, interest, expenses (including without limitation, reasonable attorney's fees, witness fees, and disbursements incurred in the defense thereof) arising out of or by reason of the negligence of said contractor, its subcontractors, anyone directly or indirectly employed by them, and/or anyone for whose acts and/or omissions they may be liable.

(2) Require the contractor to be an independent contractor for the purpose of completing the work provided for in this Agreement.

(3) Require the contractor to provide and maintain insurance in accordance with the same insurance requirements set forth above.

#### **ARTICLE VI Affirmative Action**

In accordance with Hennepin County's Affirmative Action policies against discrimination, no person shall be excluded from full employment rights or participation in or the benefits of any program, service or activity on the grounds of race, color, creed, religion, age, sex, disability, marital status, affectional/sexual preference, public assistance status, ex-offender status or national origin; and no person who is protected by applicable Federal or State laws, rules and regulations against discrimination shall be otherwise subjected to discrimination. The City shall furnish all information and reports required by the County's Affirmative Action Policy. The City shall adopt and comply with the County's Equal Employment Opportunity/Affirmative Action Policies with regard to employment and contracting.

Further, if this Agreement be for a sum over \$50,000 or is one of the several Agreements with the City within a 12-month period totaling more than \$50,000 or is amended to exceed \$50,000 and (a) a written governmental jurisdiction plan exemption is granted by the County's Manager of the Targeted Contract Services Division, it is agreed that Hennepin County's Appendix Z forms a part of this Agreement; or (b) written exemption is not granted or is withdrawn by said Director, then it is agreed that (1) Hennepin County Appendix Y forms and is a part of this Agreement as though fully set forth herein, (2) the City will furnish all information and reports required by the Hennepin County Affirmative Action Policy, and (3) the City shall adopt and comply with the Hennepin County Board's Equal Employment Opportunity/Affirmative Action Policies with regard to employment and contracting. If at any time during the Agreement period the basis of an approved exemption should change, the City shall inform the Director in writing within ten (10) calendar days from the date of said change.

The provisions of Minnesota Statutes 181.59 and of any applicable local ordinance relating to civil rights and discrimination and the Affirmative Action Policy statement of Hennepin County shall be considered a part of this agreement as though fully set forth herein.

**ARTICLE VII**  
**Alterations**

Any material alterations, variations, modifications, or waivers of provisions of this Agreement shall only be valid when they have been reduced to writing as an amendment to this Agreement signed by the parties.

**ARTICLE VIII**  
**Independent Contractor**

It is agreed that nothing herein contained is intended or should be construed in any manner as creating or establishing the relationship of co-partners between the parties hereto or as constituting the City as the agent, representative or employee of the County, for any purpose or in any manner whatsoever. The City is to be and shall remain an independent contractor with respect to all services performed under this Agreement. The City represents that it has, or will secure at its own expense, all personnel required in performing services under this Agreement. Any and all personnel of the City or other persons, while engaged in the performance of any work or services required by the City under this Agreement, shall have no contractual relationship with the County and shall not be considered employees of the County, and any and all claims that may or might arise under the Workers' Compensation Act of the State of Minnesota on behalf of said personnel or other persons while so engaged, and any and all claims whatsoever on behalf of any such person or personnel arising out of employment or alleged employment including, without limitation, claims of discrimination against the City, its officers, agents, contractors, or employees shall in no way be the responsibility of the County, and the City shall defend, indemnify and hold the County, its commissioners, officers, agents and employees harmless from any and all such claims regardless of any determination of any pertinent tribunal, agency, board, commission or court. Such personnel or other persons shall not require nor be entitled to any compensation, rights or benefits of any kind whatsoever from the County, including, without limitation, tenure rights, medical and hospital care, sick and vacation leave, Workers' Compensation, Re-employment Compensation, disability, severance pay and PERA.

**ARTICLE IX**  
**Subcontracting and Assignments**

The City shall not assign, sublet, transfer or pledge this Agreement and/or the services to be performed hereunder, whether in whole or in part, without prior written consent of the County which cannot be unreasonably withheld.

**ARTICLE X**  
**Data Privacy**

The City agrees to abide by the provisions of the Minnesota Government Data Practices Act and all other applicable state and federal laws, rules and

regulations relating to data privacy or confidentiality, and as any of the same may be amended. The City agrees to defend and hold the County, its officers, agents and employees harmless from any claims resulting from the City's unlawful disclosure and/or use of such protected data.

#### **ARTICLE XI Recycling**

The City agrees to establish an office paper and newsprint recycling program which shall include a written plan available to the County at the County's request containing the following: description of the plan; person and position responsible for plan administration; types of paper collected and method of collection and transportation to a recycling center; an annual report summarizing collection efforts.

#### **ARTICLE XII Minnesota Laws Govern**

The Laws of the State of Minnesota shall govern all questions and interpretations concerning the validity and construction of this Agreement and the legal relations between the herein parties and performance under it. The appropriate venue and jurisdiction for any litigation hereunder will be those courts located within the County of Hennepin, State of Minnesota. Litigation, however, in the federal courts involving the herein parties will be in the appropriate federal court within the State of Minnesota. If any provision of this Agreement is held invalid, illegal or unenforceable, the remaining provisions will not be affected.

#### **ARTICLE XIII Termination**

Either party may terminate this Agreement upon sixty (60) days written notice.

#### **ARTICLE XIV Notices**

Any notice or demand which must be given or made by a party hereto under the terms in this Agreement or any statute or ordinance shall be in writing, and shall be sent registered or certified mail. Notice to the County shall be sent to the County Administrator with a copy to the Department of Public Works, Environmental Management Division, at the address given in the opening paragraph of this Agreement. Notice to the City shall be sent to the City Manager with a copy to the Director of Public Works at the address given in the opening paragraph of this Agreement.

**ARTICLE XV**  
**Record Availability**

The County agrees that the City, the State Auditor or any of their duly-authorized representatives, at any time during normal business hours and as often as they may reasonably deem necessary, shall have access to and the right to examine, audit, excerpt and transcribe any books, documents, papers, records, etc., which are pertinent and involve transactions relating to this Agreement. Such material must be retained for five (5) years by the County. The County's accounting practices and procedures relevant to this Agreement shall also be subject to examination by any or all of the aforesaid persons as often as and during such times as aforesaid.

The City agrees that the County, the State Auditor or any of their duly-authorized representatives, at any time during normal business hours and as often as they may reasonable deem necessary, shall have access to and the right to examine, audit, excerpt and transcribe any books, documents, papers, records, etc., which are pertinent and involve transactions relating to this Agreement. Such material must be retained for five (5) years by the City. The City's accounting practices and procedures relevant to this Agreement shall also be subject to examination by any or all of the aforesaid persons as often as and during such times as aforesaid.

**ARTICLE XVI**  
**Dam Ownership**

It is understood and agreed that upon completion of construction of the new Dam, the Dam shall become the property of the County. All maintenance, restoration, repair, replacement or other work or services required thereafter shall be performed by the County.

The City, having signed this Agreement, and the Hennepin County Board of Commissioners having duly approved this Agreement on Sept 12, 1995, and pursuant to such approval and the proper County officials having signed this Agreement, the parties hereto agree to be bound by the provisions herein set forth. JC

Approved as to form:

Brian C. Deitz  
Assistant County Attorney

COUNTY OF HENNEPIN,  
STATE OF MINNESOTA

By: Peter W. Smith  
Chair of its County Board

Date: July 26, 1995

And: D. Smith 8/14/95  
Associate/County Administrator

Approved as to execution:

[Signature]  
Assistant County Attorney

ATTEST: Judith A. Chumley  
Deputy/Clerk of the County Board

Date: 8/8/95

Recommended for Approval

By: Walt Longmire  
Director, Department of Public Works

City of Plymouth

By: Spencer H. Timney  
Its Mayor

And: Oswight W. Johnson  
Its City Manager

City organized under:  
 Plan A  Plan B  Charter