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Como Lake TMDL MS4 Meeting February 17, 2010, 10:00 am Capitol Region Watershed District Office

- 1. Welcome and Introductions
- 2. Review of process to date
- 3. Total Maximum Daily Load Studies Description
- 4. Review and Comparison of Como Lake Strategic Management Plan and Como Lake TMDL
- 5. Discussion of Waste Load Allocation Approach
- 6. Next steps

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# **Como TMDL MS4 Meeting**

**February 17, 2010** 

**Attendees:** 

**City of Falcon Heights** 

**City of Roseville** 

City of St. Paul

**Ramsey County** 

**MNDOT** 

**Capitol Region Watershed District** 

**MPCA** 

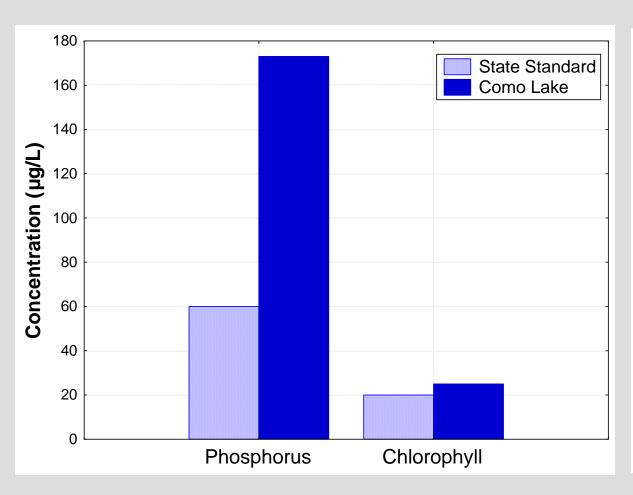
# Background

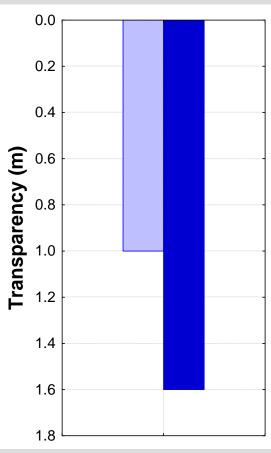
Capitol Region Watershed District created, 1998
Capitol Region Watershed District adopts WMP, 2000
Como Lake Strategic Management Plan adopts, 2002
Como Lake listed as a 303d impaired water, 2002

# **Lake Impairment + Goal**

- Lake impaired for aquatic recreation, nutrients identified as primary pollutant
- Sources of nutrients in Como Lake: stormwater runoff, internal load, atmospheric deposition
- State Shallow Lake Goal
  - 60 ppb total phosphorus
  - 20 ppb chlorophyll
  - 1.0 m transparency
- Como Lake
  - 173 ppb total phosphorus
  - 25 ppb chlorophyll
  - 1.6 m transparency

# **Como Lake Water Quality**





## What is a TMDL?

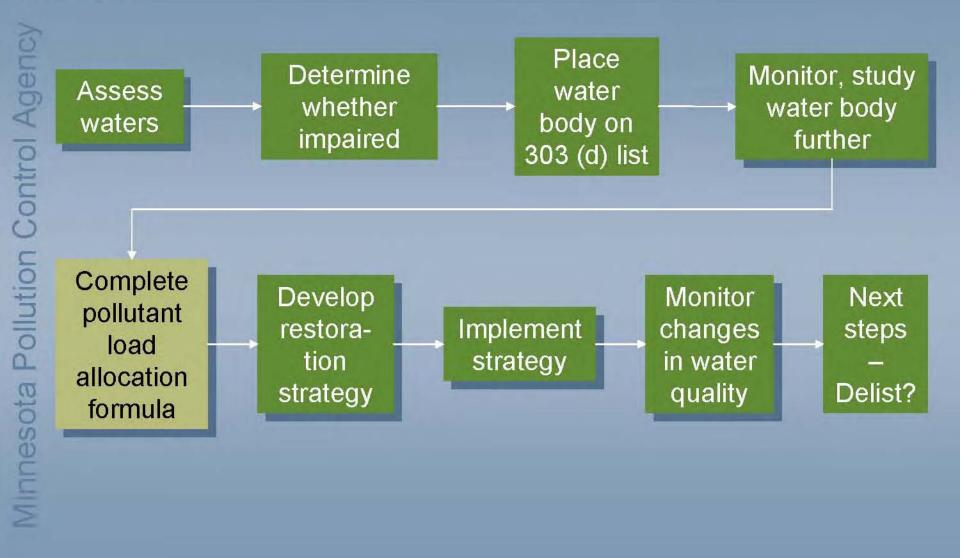
- The maximum amount of a pollutant a waterbody can receive and still maintain water quality standards
- TMDLs originate from section 303(d) of the Clean Water Act

#### TMDL = Load Allocation + Wasteload Allocation + Margin of Safety

- Load Allocation: non-permitted stormwater + internal load + atmospheric load
- Wasteload Allocation: permitted stormwater inputs + other NPDES permitted discharges
- Margin of safety: Calculated based on uncertainties in monitoring data and inlake model, can be implicit or explicit



# TMDLs – the process



### **Process to date**

Early 2008, CRWD determined as part of 2010 WMP to convert Como Lake Strategic Management Plan (CLSMP) to TMDL

July 2008, Meet with MPCA to confirm elements of TMDL were accomplished with CLSMP

During 2009, converted CLSMP into TMDL format. No technical changes made

January 21, 2010, sent (informal) draft TMDL to all MS4s

January/February 2010, met with municipalities to discuss TMDL

February 17, 2010, MS4 meeting

### **CLSMP & Como TMDL**

### Stakeholder input (16 mtgs by 3 advisory groups)

CLSMP—pg 7-10

TMDL—pg 42-44

## Water Quality Goal (60 ppb = NCHF Shallow Lake)

**CLSMP—pg 34-36** 

TMDL—pg 15

# Loading Reductions, Wasteload Allocations (reduce from current/2000 levels of 625 lbs/yr to 249 lbs/yr)

CLSMP—pg 71-74

TMDL—pg 30-32

## Como TMDL

TMDL = Load Allocation + Wasteload Allocation + Margin of Safety

Page 
$$30$$
— $306 lbs/yr = 57 lbs/yr + 249 lbs/yr$ 

- Load Allocation: non-permitted stormwater + internal load + atmospheric load
- Wasteload Allocation: permitted stormwater inputs + other NPDES permitted discharges
- Margin of safety: Calculated based on uncertainties in monitoring data and inlake model, can be implicit or explicit

### **NPDES** and WLAs

#### **NPDES-permitted stormwater runoff**

#### MS4s

- Municipalities (St. Paul, Falcon Heights, Roseville)
- Ramsey County (as road authority)
- Mn/DOT (as road authority)
- CRWD

**Construction stormwater (various) Industrial Stormwater (no current sources)** 

#### Other NPDES permitted P sources

(no current sources)

# **Approaches to WLAs**

- Categorical One WLA is assigned to all of the regulated MS4s
- Individual Each regulated MS4 receives an individual WLA
  - Split up WLA by area, population, imperviousness, etc...

# **Implementation Approach**

Implementation Plan from CLSMP was generally reflected in current draft TMDL (pgs 36-41)

Concern about having these prescriptive actions in the TMDL

Potential confusion with a TMDL implementation plan

**Consider generalizing?** 

### **MS4 SWPPPs**

NPDES General Stormwater Permit requires permitted communities to incorporate TMDL implementation into SWPPP

Must amend SWPPP within 18 months of TMDL adoption

Implementing TMDLs will involve both capital projects and non-capital activities

TMDL implementation plans being structured to be easily incorporated into SWPPPs

## **Approval Process**

#### <u>Informal</u>

February 24, 2010 -- CRWD make changes based on input from MS4s and distribute revised draft

March 19, 2010 - Deadline for Comments from MS4s

March 26, 2010 - Revised draft to MS4s

Early April – Submit TMDL to MPCA for review

#### **Formal**

MPCA completes technical review of TMDL (~3 months)

Revisions based on technical review (~1 month)

**EPA Preliminary Review (3-4 months)** 

Revisions based on EPA Review (1 month)

**Public Notice (30 days)** 

MPCA holds draft TMDL (30 days)

MPCA submits draft TMDL to EPA for approval (4 month)

#### Como Lake TMDL – MS4 Stakeholder Meeting

CRWD Office February 17<sup>th</sup> 2010

#### **Meeting Summary**

#### In attendance:

Brooke Asleson – MPCA	Bob Fossum – CRWD
Mike Trojan – MPCA	Mark Doneux – CRWD
John Manske – Ram Co Public Works	Pat Conrad – EOR
Anne Weber – City of St. Paul	Andrea Plevan – EOR
Beth Neuendorf - MNDOT	Deb Bloom – Cities of Roseville &
	Falcon Heights
Phil Belfiori – City of St. Paul	

#### Welcome & Introductions

Bob reviewed a powerpoint presentation which facilitated the discussion.

Beth – MnDOT would like to see an individual allocation. It was also suggested that all Road Authorities could have an individual and municipalities would have categorical.

Brooke – most TMDLs that they see are categorical. MPCA prefers categorical when there is a strong entity taking the lead on implementation like CRWD is doing.

Bob noted that only 0.6 of 1855 acres of subwatershed is MNDOT.

Bob provided breakdown on area per MS4

St. Paul	64%
Roseville	22%
Falcon Heights	12%
Ramsey County	2.2%
MnDot	0.03%
CRWD	0.02%

Deb asked about credit and trading in conjunction with categorical vs individual allocations.

Mike – categorical works great as long as everyone stays friends. Getting to goal is helped by having District rules.

Mark stated the work done in Como 7 already counts towards reaching the reduction goal.

Bob mentioned that getting to the load allocation will be accomplished through all types of programs not just projects.

Beth – MNDOT really wants to know what the MNDOT allocation number will be. Can't be zero - MPCA noted that there has to be a number or they can't discharge.

Deb too would like to see the city's number.

Brooke said that they typically like to see that in the actual implementation plan.

Deb asked what MPCA likes to see in a TMDL and compared it to the city's ordinance process where they like to keep it as a framework with all the details in accompanying documents.

Brooke – the only thing that is enforceable is the actual wastleload allocation. Anything in the implementation plan is beyond that.

Brooke – keeping the strategies general and then have the implementation plan have the details is the desired approach. So the only thing that the MS4s would be reviewed/judged on later would be the TMDL.

Phil – in a previous meeting with the District, the City of St. Paul indicated that they would like to jointly develop the implementation plan.

Mike - stated he believed there was too much detail right now in the implementation section of the TMDL. Most of this information needs to move to the implementation plan.

Bob – table 2 could have Ramsey County and MNDOT added.

Table 13 would have the MnDOT allocation.

Bob asked Ramsey County what there preference would be. John was not able to answer but would discuss with Terry Noonan and report back.

Phil – can we not include section 9? Brooke – responded, No, TMDLs have to include an implementation strategy. Each of the headings is a required element of the TMDL as required by EPA.

Mike – In 2-3 months MS4s will now what the revised phase 2 permit will say.

Brooke – Timeframe for implementation plan is within one year from EPA approval but MPCA prefers it to be sooner.

Phil – they would like to begin the implementation plan soon.

Bob asked what level of specificity the MPCA is looking for in the implementation plan

Brooke – wants estimated costs and removals. Don't need to see actual locations. Suite of options that lay out the costs, removal and who is responsible.

Bob – would you want to see a greater list of options. Would the MS4s not need to do them all?

Brooke – more options the better. No – wouldn't need to do it all.

Mike – the approach would be to lay out general terms in MS4 permit. It would need to say something like.. "continued implementation to get towards X% reduction."

Deb – It would be nice to see an approved implementation plan to see the level of detail.

Brooke – need to develop a list of BMPs that MS4s agree to. MPCA likes to see the plans being used into the future

Deb – likes it because they already have projects in planning that would allow them to work towards the implementation.

What is the timeline for review? Brooke – in general about 6 months after submittal the TMDL would be approved.

Mark – we have the appropriate level of detail in the Como Plan.

Mark explained the goals that are in the Como Plan

Mike – MPCA has not reviewed a TMDL plan when reviewing a SWPPP.

Someone in the group asked, Will future permits have that requirement?

Mike – thinks it will be used as a guide. Will review it and see what 'equivalent' controls were used. MPCA would consider the MS4s in compliance if they demonstrate progress towards the TMDL.

Brooke – you could take out the BMPs from the TMDLs and use in your SWPPP

Mike – they are trying to figure out how the MPCA would be looking at SWPPPS that use categorical allocations

Bob – District envisions doing the annual accounting to document how everyone had done on implementation and then distribute the report to the MS4s for them to submit in their SWPPP reporting. Need to capture load reductions by regulation and even small unregulated actions on private property and things like sweeping. District would commit to doing this work.

Deb – street sweeping has a benefit but there is also a cost. What if the council cuts the budget. From a reporting standpoint if you build a project that removes sediment over time how do you account for that versus annual changes that would occur for street sweeping.

Bob – you'd show an annual removal based on actual performance for some and others you'd just use the assumed phosphorus removal.

Deb – in order to get credit they'd need to show all the work they've done towards compliance. Deb would have to go through records/etc to see what's been done in the Como subwatershed going back to 2002. From now on it would be a lot easier.

Deb – does not have more time to do the accounting for this.

Anne – part of the implementation plan would be documenting what's been done from 2002 until now.

Bob - District is committed to helping with this.

Mike – first round permits could be as simple as developing the system to be used to document the implementation/compliance.

Bob updated the next steps with input from Brooke

Anne – how does internal loading factor into this?

Andrea – described the in-lake loading number and why it is so high. With shallow lakes like Como – it's really hard to predict the biological functioning of the lake. Described that a 95% reduction is aggressive but attainable. For comparison Kohlman Lake has an internal load reduction of 88%

Anne – are they taking steps to address the internal? Brooke – yes.

Anne – is concerned that the wasteload is what is regulated. What if the in-lake is not met – do you come back to the regulated part?

Brooke – only looks at the wasteload. Never look at the in-lake. Anne is concerned about future review. She's concerned that at a future date would they be required to do more.

Mike – at that point you could pursue other options like use attainability analysis.

Deb – what about concerns about reducing the hydrology of the lake. Has there been any review of that? Is that anything that people are concerned about.

Mike – they don't look at that.

Andrea - that can be an issue.

Beth asked about the ChIA and transparency. Could it be de-listed if those are met?

Brooke – No, it has to be TP and one of the others (ChIA, transparency).

Phil – St. Paul parks department has concerns about water levels and the types of BMPs that are installed.

Mike – what does EPA think about the distribution of internal to watershed load?

Brooke – other TMDLs have had similar distribution approaches and they are in different levels of review by EPA

Bob - Plan and subwatershed loading analysis looks at a reasonable approach.

John stated that they didn't feel that an alum treatment in lake would work. Asked about changing the aeration system.

Bob – part of the CRWD Watershed Management Plan is to review the internal loading dynamics in Como Lake in more detail. Mentioned the fisheries management approach taken previously and the result that it had.

Andrea mentioned the conflict between the fisheries management and the water quality needs.

Bob – you can expect to see a revision soon. Revision would consist of addressing MnDOTs desire to have an individual allocation through changing some tables AND taking out detail from the implementation strategy section.

Phil – can the MS4s see the changes from their responses before it goes to MPCA. They want more time to review the changes after the March 12.

Bob – changes are minor and hopefully shouldn't take too long to review. Adding the MNDOT and then changes to the detail in section 9.

March 19<sup>th</sup> for comments from MS4s Revised draft to MS4s by March 26<sup>th</sup> (depending on the scope of comments) Submit to MPCA in early April.

Bob – we could meet to address comments if that speeds up the process.