

Wetland Health Evaluation Program



Dakota County 2007

Photographs courtesy of
Mary Kay Lynch



It is inspiring to work with so many dedicated people.





Special Congratulations:
To all of the WHEP volunteers who
donated their time and were out in
the wetlands or behind the
microscopes.



Quality Control Fortin Consulting



This is the first year FCI is working with Dakota County on the WHEP program.

- ❖ To review the vegetation sample plot selected and evaluated by the citizen team
- ❖ To review the invertebrates collected by the citizen team
- ❖ 2007 Dakota County WHEP Report

Three wetlands were cross checked in 2007:



Rosemount (R-1)



Eagan (E-7)



Hastings (H-6)

Quality Control Results



Most of the City scores were found to be consistent with the quality control checks

Suggestions for future sampling

- ❖ View invertebrates side-by-side
- ❖ Study invertebrates that are not part of the metrics
- ❖ Double check paperwork – preferably by a different team member
- ❖ Press unknown vegetation (or take a photo)
- ❖ Take photographs of wetland sites



Wetlands and Volunteers



In 2007, 8 city teams surveyed 31 wetlands in Dakota County.



Apple Valley

- ❖ Four wetlands monitored in 2007
- ❖ Poor to moderate wetland health
- ❖ Farquar Lift Station (AV-11) scored an Excellent invertebrate score
- ❖ 3 of the wetlands were monitored for the first time in 2007



Burnsville

- ❖ Three wetlands monitored in 2007
- ❖ Moderate to excellent wetland health
- ❖ Most of the indexes scored moderate
- ❖ Vegetation scores lower than invertebrate scores
- ❖ *Crystal West (B-1) had the highest score of all the wetlands monitored in 2007*



Eagan

- ❖ Four wetlands monitored in 2007
- ❖ Moderate to poor wetland health
- ❖ Invertebrate score at Cedar Pond (E-10) indicates improving health (8 yrs of data)
- ❖ JP-42 (E-24) sampled for the first time



Farmington

- ❖ Four wetlands monitored in 2007
- ❖ All four wetlands have been monitored 10 or 11 times
- ❖ *All four wetlands scored poor wetland health*
- ❖ *All four wetlands indicate declining health*



Hastings

- ❖ Four wetlands monitored in 2007
- ❖ Poor to moderate wetland health
- ❖ Stonegate treated (H-4) shows improving conditions (restoring native restoration)



Lakeville

- ❖ Four wetlands monitored in 2007
- ❖ Poor to excellent
- ❖ great consistency between invertebrate and vegetation scores
- ❖ NC54 (L-9) scored the lowest invertebrate score in 5 years of monitoring



Mendota Heights and West St. Paul

- ❖ Two wetlands monitored in Mendota Heights & one wetland in West St. Paul
- ❖ Copperfield (MH-2) scored excellent for invertebrates
- ❖ The other sites scored poor to moderate for both invertebrates and vegetation



Rosemount

- ❖ Five wetlands monitored in 2007
- ❖ Invertebrate scores indicate moderate to excellent wetland health
- ❖ Vegetation scores indicate poor to moderate wetland health





General Results

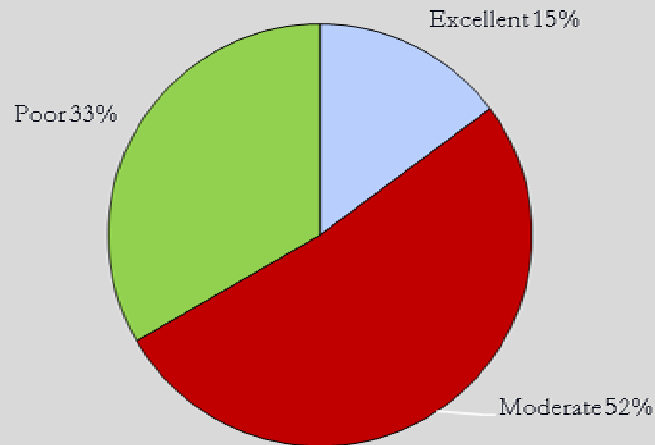


- ❖ The majority of the wetlands scored moderate for both invertebrates and vegetation.
- ❖ More categories rated excellent for invertebrates than for vegetation.
- ❖ 11% of the wetlands showed opposite invertebrate and vegetation trends.



Wetland Health: Invertebrates

Dakota County 2007



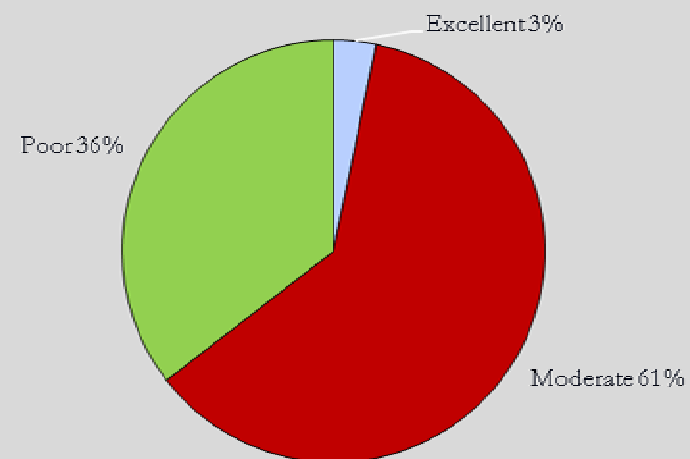
General Results

❖ The majority of the wetlands scored moderate for both invertebrates and vegetation

- ❖ More excellent ratings for invertebrates than for vegetation
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Wetland Health: Vegetation

Dakota County 2007



Wetland Health Ratings per City (Invertebrates/Vegetation)

City	Poor	Moderate	Excellent
Apple Valley (AV)	2/2	1/2	1/0
Burnsville (B)	0/0	2/3	1/0
Eagan (E)	1/1	3/3	0/0
Farmington (F)	2/4	0/0	0/0
Hastings (H)	2/2	2/2	0/0
Lakeville (L)	1/0	1/3	1/1
Mendota Heights (MH)	1/0	0/2	1/0
Rosemount (R)	0/2	4/3	0/0
West Saint Paul (MH)	0/0	1/1	0/0

The City of Burnsville shows the Highest overall wetland health

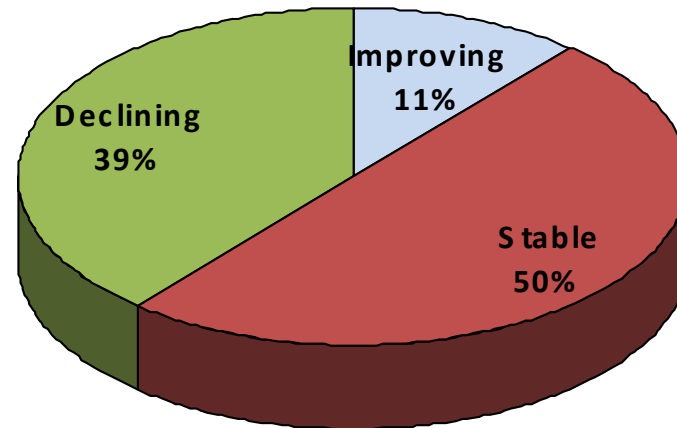
- ❖ one excellent invertebrate score
- ❖ two moderate invertebrate scores
- ❖ all moderate ratings for vegetation



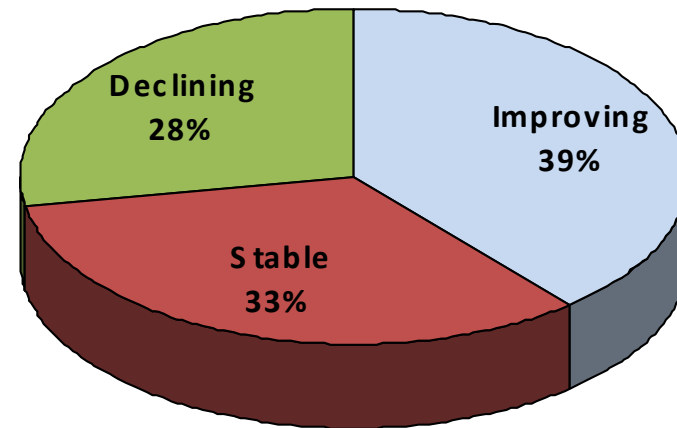
Trends

13 of the 31 wetlands lacked enough data to analyze trends

Vegetation Wetland Health Trends



Invertebrate Wetland Health Trends





Local government can use WHEP data:

- ❖ To track changes in the wetlands and relate these changes to the watersheds
- ❖ To identify high quality wetlands that may need protection



WHEP gives citizens an opportunity:

- ❖ to study the wetlands in their communities
- ❖ to see the impacts of human disturbance on our wetlands
- ❖ to give a sense of involvement and connection to the outdoors



Photo courtesy of Darcy Tatham

Keep up the good work!!

