

# **Des Plaines River Watershed Workgroup**

## **Lakes Subcommittee**

### **January 28th, 2016 Meeting Agenda**

**10:00AM – 500 W. Winchester Road, Libertyville, IL, Room 1168**

**OR**

Join the call: 847-377-3200, then 8002#

1. Introductions and purpose of subcommittee
2. Review of Lake County lakes in the Des Plaines River Watershed
  - a. Summary of existing data
3. Identification of data gaps
4. Monitoring
5. Next meeting - TBD





**DRWW  
Lakes Committee Meeting Notes  
1/28/2016**

Attendees: Mike Adam (LCHD), Gerry Urbanozo (LCHD), Alana Bartolai (LCHD), Jim Bland (UW-Wisconsin), Joe Robinson (North Shore), Rob Flood (North Shore), Mike Prusilla (SMC), Sharon Osterby (SMC), Mike Warner (SMC)

Initial Lakes Committee meeting

- Purpose: open discussion to understand and identify what data is currently available on lakes in the Des Plaines River Watershed, what data gaps are present, what monitoring is feasible
- Provide recommendations to Executive Committee
- Gather information, review, identify gaps, make recommendations

DRWW overview:

- DRWW overall goal is identifying pollution sources and identifying solutions.
- Three Committees: Monitoring, Impairments, Lakes Committee.
- DRWW has contracted with suburban Labs Stream Monitoring:
  - Midwest Biodiversity – macros
  - Burns & McDonnell – flow

Des Plaines Watershed ~130 lakes in our database

- >94 lakes over 6 acres (state definition of “lake” )
- 50 lakes over 20 acres
- Corrections on Excel Sheet: Sanctuary pond (in addition to Lake Leopold) needs to be corrected
  - Identify coordinates for sample sites.
  - Two Dog Lakes (Update: Dog Lake 2 is identified as Peterson Pond in this excel)

Other sources of data that need to be looked at:

- Fish (DNR, Consultants)
- VLMP
- IEPA Ambient Program

Lake Shoreline Assessments:

- Based on EPA standards

- LCHD & SMC identified lakes >20 acres and not wetlands
- LCHD can still include wetlands
- Current Excel sheet has some prioritization for lakes that still need shorelines (3 – hard access)
- Question for Lakes Committee: Should we include lakes that do not fit this category if they have significant biological indicators (T/E) or other unique properties?

How do we focus lake recommendations:

- internal vs. external
- TMDL load recommendations (directly impact MS4)

Identifying data gaps:

- loading estimates
- detailed input monitoring
- sediment data

Prioritization process of lakes

- Lakes committee could try & establish which lakes have best potential for remediation
- Need some form of prioritization since there are so many lakes

How can lake work be funded?

- Are there additional funds outside EPA/DRWW
- Can DRWW fund some of LMU work?
- Currently there is some additional money in the budget

Other Issues:

- Biological monitoring plan for streams: is Midwest Biodiversity identifying linkages, migration corridors, statistical analysis
  - ex: Dupage – chris looked at 300 different factors and identified 9 significant factors.
- Is there adequate biological data for the lakes (fish, macros,) or is this a data gap?
  - T/E species ?
  - no real IBI for lakes
  - plankton?

Moving forward:

- Expand database of data
  - break up by morphometric types
  - LCHD –ES organize data and by next meeting we can share with group and identify data gaps.
- Prioritize lakes
- Lakes Committee will meet quarterly, 4<sup>th</sup> Thursday of every quarter. Next meeting: April 28, 2016 @ Permit Center Libertyville



## **Des Plaines River Watershed Workgroup**

### **Lakes Subcommittee**

#### **April 28th, 2016 Meeting Agenda**

**10:00AM – Central Permit Facility, 500 W. Winchester Road,  
Libertyville, IL, Room 1168**

**OR**

Join the call: 847-377-3200, then 8002#

1. Call the meeting to order
2. Agenda Changes/Approval
3. Approve Previous Meeting minutes
4. Public Comment
5. Review of Lake County lakes in the Des Plaines River Watershed
  - a. Summary of existing data
    - i. Water quality
    - ii. Fish/Macros
    - iii. Morphometrics
  - b. Single database
6. Data Needs/Gaps
  - a. Sediment
  - b. Ties to TMDLs, stream data
7. 2016 Monitoring (Independence Grove, Sterling, Des Plaines Lake, Bresen, Carina, Ames?)
8. Next steps
9. Next meeting – July 28<sup>th</sup>, 2016
10. Adjourn



DRWW

Lakes Committee Meeting Notes

4/28/2016

Attendees: Mike Adam (LCHD), Gerry Urbanozo (LCHD), Alana Bartolai (LCHD), Jim Bland (UW-Wisconsin), **Joe Robinson (North Shore)**, Rob Flood (North Shore), **Mike Prusilla (SMC)**, Sharon Osterby (SMC), Mike Warner (SMC), Tom Morthorst (Citizen – Third Lake), Nick (DNR)

**Red= absent from meeting**

Mike Adam: Call the Meeting to Order

Approval of meeting minutes:

Alana Bartolai: Motion to accept

Gerry Urbanozo: Second

Public Comment: If meetings get larger, limit to one person per agency/organization, at current time – not an issue

Review of Lake County Lakes in the Des Plaines River Watershed

a) Summary of existing data:

- a. Secchi depth: top ones are gravel pits except Druce and Third (glacial)
- b. FQI: top 10 are glacial lakes/wetland lakes high biodiversity / floristic quality
  - i. Also issues with aquatic plant management (i.e. salem lake had a high one, but now lower due to herbicide treatment)
  - ii. Aquatic plants education issue for lake management
  - iii. Anything over >20 is great for aquatic systems (terrestrial not the same)
  - iv. FQI doesn't incorporate biomass – just species present

b) LCHD will update the list as much as possible

c) Fish species data (not complete) – data mostly from IDNR – needs to be updated

- a. Nick sent data to Mike Prusilla – need to combine data (separate ponds/streams/lakes)
- b. DNR tends to target gamefish

d) Phosphorus – top 10 are gravel pit lakes

e) Potential to do some more detailed analysis by morphometric type

f) Separate out ponds – streams – lakes to look at connectivity – structures acting as a barrier (dams/culverts)

- Macroinvertebrates in lakes: IEPA wants to develop,
  - Nova Scotia done lots of work
  - Not really anyone doing that for lake health
  - Ex: Loon Lake found 5 mussels in there (fairly unique)
- Morphometrics: most of the lakes have a bathymetric map
  - “Unknown” category are lakes we have not been able to get on, or too small for data.
  - Combine data sources VLMP, LCHD, IEPA
  - Where do we want to go with the information
  - Lake Bio-diversity Project with Holly Hudson used to identify for grant projects
  - Sanctuary ponds for raising fish
  - **Addition:** Lake Leopold should be added to the Lake Bio-diversity list
  - Grant money 303D Impairment committee should focus on priorities lakes that currently have good water quality and biodiversity.

- How to determine which lakes should be prioritized and how should lakes be prioritized.
- Develop metrics on determining the importance or impact of a lake and how to rank / categorize them. Hydraulically connected or isolated lakes.
- Jim Bland - What types of management or intervention should be taken into account.
- Education of Lake Management – Highlighting aquatic plant management which impacts fish and water quality.
- Recommending aquatic management plans along with plant management plan to HOA or lake communities.
- Compare lake data with stream data fish sampling and monitoring in the future.
- How will the different committees combine the data in the future? Impairment – Monitoring-Lakes
- Identify contacts to individual lakes representatives on their concerns. Send out a questionnaire.
- Form for lake groups to submit data – things are happening yearly that lake groups
- Data is fragmented
- Potential for data needs for lake monitoring (down the road/long term)
- Data needs: sediment monitoring , inlet monitoring
- Could VLMPs be used to collect more data
- Load allocations from stream monitoring
- Tom Morthorst : explaining data to public, problem with the lack of aquatic plants , fishing and sport fish. Figure out a way to reduce chloride from going into the lakes. How to maintain or improve conditions in the lakes.
- Each lake will have a unique need that needs to be addressed individually.
- Jim Bland – No educational outlet in the county for lake related things. Put pressure in the college and teach Lake Management or educate Lake managers and owners.
- Tom Morthorst – We need to get Lake Representatives to join in this meeting by sending out a form or survey. Lakes Associations are missing out by not attending the DRWW meetings by not utilizing the resources available.
- Sharon Osterby - Lake Associations were informed about the Lakes Meeting.
- Mike Warner – 9 Lakes study was a success.
- Mike Adam – send out a questionnaire to get input from lake managers. Invite them to a larger group meeting.
- Rob – Identify projects with real world solutions and get projects going.
- Jim – prioritize lakes and identify which lakes we should send a questionnaire
- Rob – identify lakes that have active management or solid contact.
- Sharon – Sending out a questionnaire to 90 lakes is not a problem since you are only going to get a limited response.
- Nick – Less than 20 lakes are owned by the LCFP
- Sharon – We need to get people to the table to discuss the issues for possible grant funding. Give prioritization to those who are interested. Who we are missing or update the contact list.
- Mike – pursue questionnaire, work with watershed plan list, develop layout of questionnaire – create a draft.
- Phone questionnaire and follow-up with a phone contact.
- Rob – explain the incentives of participating with the DRWW group.
- Sharon – ILMA in Crystal Lake involving DRWW
- Mike –ILMA PODS
- Jim – Sierra Club Canoe event

- Mike – Additional analysis with biodiversity, Data Gap with sediment, get the impairment committee started. Shoreline assessment. Next meeting – draft a questionnaire and send question ideas to Mike.
- Rob – wants to contact Frank Jackubicek to get the data if needed.
- Jim Bland – Illinois Institute of Technology – Zebra Mussel monitoring. How to go about monitoring and coordination with the University.
- Jim Bland Motion to adjourn.....





## **Des Plaines River Watershed Workgroup**

### **Lakes Subcommittee**

#### **October 27th, 2016 Meeting Agenda**

**9:00AM – Central Permit Facility, 500 W. Winchester Road,  
Libertyville, IL, Room 1168**

**OR**

Join the call: 847-377-3200, then 8002#

1. Call the meeting to order
2. Agenda Changes/Approval
3. Approve Previous Meeting minutes
4. Public Comment
5. 2016 & 2017 Monitoring
6. Water quality, fish, macrophytes database
7. Lake Questionnaire/Education
8. Lake Restorability Ranking
9. Data Needs/Gaps
  - a. Sediment
  - b. Modeling
  - c. Zebra mussels
  - d. Ties to TMDLs, stream data
10. Recommendations to Executive Board
11. Next meeting – January 26<sup>th</sup>, 2017
12. Adjourn

DRWW  
Lakes Committee Meeting Notes  
10/27/2016

Attendees: Mike Adam (LCHD), Alana Bartolai (LCHD), Jim Bland (Third Lake/Sierra Club), Rob Flood (North Shore Reclamation District/Gages Lake), Ernesto (SMC), Sharon Osterby (SMC), Tom Morthorst (Village of Third Lake), Kathy Paap (Wetlands Inc.), Beth Adler (Technical Coordinator DRWW), Nick Huber (LCFPD), Jeff Weiss (Buffalo Creek Clean Water Partnership)

1. Mike Adam – Call Meeting to Order
2. Agenda Changes/Approval (Approved)
3. Approve Previous Meeting minutes
  - a. Sharon Osterby motion to approve
  - b. Tom Morthorst second
4. Public Comment
5. 2016 & 2017 Monitoring
  - a. LCHD monitored 7 lakes within Des Plaines Watershed in coordination with LCFPD
    - i. Still waiting on data, will share summaries/results at future meetings
  - b. Re-assessing shorelines in DRWW
    - i. Break shorelines into similar segments based on shorelines/landuse
    - ii. 50 lakes over 20 acres, 94 over 6
      1. Identify which lakes are hydraulically connected to Des Plaines (in reference to fish passage)
6. Water quality, fish, macrophytes database
  - a. Fish data – Nick from LCFPD & DNR
  - b. MBI (Midwest Biodiversity Institute) will be analyzing stream data and LCHD will be coordinating to provide lake data
    - i. DRWW emulating Salt Creek Watershed but some key differences including lakes
    - ii. Identify migration corridors
  - c. Stream Data: needs to be combined/organized
  - d. DRWW – special section for website just for lakes.
    - i. List of Impairments of lakes
    - ii. Lake summaries
    - iii. Some lakes impairments based on old data – maybe could have a qualifier to note concerns on impairments and justify DRWW monitoring
      1. Push for impairments group to meet.
    - iv. List of lakes that have TMDLs or scheduled for TMDL out of the 50 lakes.
7. Lake Questionnaire/Education
  - a. Engage lake associations/homeowners
  - b. LCHD has a draft of previous surveys they conducted – could use as base
    - i. Absence of ZM on the previous list
    - ii. LCHD can create a draft – send additional question
    - iii. Send questions/suggestions to Mike Adam - LCHD will email out 2007 survey for reference and guidance
  - c. Questionnaires should include invitation to join Lakes Committee meetings.
    - i. Future meeting presenting results of questionnaire/data geared towards to Lake Meetings.

- ii. Add question about interest to attend / what is their preferred day/time.
  - iii. Potential workshop in coordination with SMC HOA workshop
  - iv. Tie in to VLMP gathering.
  - v. Encourage participation
- 8. Lake Restorability Ranking
  - a. CMAP/LCHD/DNR Biodiversity Ranking a few years ago (Holly Hudson)
    - i. Would there be any updates to this previous study (land use?)
    - ii. Having some version of prioritization important for future funding.
    - iii. Concerns: Who would do this analysis?
- 9. Data Needs/Gap
  - a. Sediment
  - b. Modeling
  - c. Zebra mussels
  - d. Ties to TMDLs, stream data
  - e. Identify water quality gaps (additional data needed)
    - i. Inlet monitoring to lakes
    - ii. HABs
      - 1. WHO updates their recommendations
      - 2. IEPA >10 ug/L let association/HOA know and they could post
      - 3. American Waterworks Association – drinking water standards for HABs
- 10. Recommendations to Executive Board
  - a. Have analysis to present to board and recommendations to provide to EB to keep importance of lake.
- 11. Next meeting – January 26<sup>th</sup>, 2017, 10 AM
  - a. Have questionnaire completed/ sent out by next meeting
  - b. Prioritizations
  - c. Identify recommendations in draft form to be given to EB
- 12. Adjourn
  - a. Tom Morthorst Motion to Adjourn
  - b. Sharon Osterby – Second

Additional Discussions:

- c. All lakes should have lake management plans (should also be identified in in the Watershed Plan)
- d. College of Lake County – Lake Curriculum/Watershed education, University Center)
- e. Route 53 construction
  - i. RFP currently out for scope of work
  - ii. DRWW should track what is suggested in EIS document