



Devils Lake Water Improvement District

2010-2011 Goal Setting Workshop

- Incomplete
- Partially Complete
- Complete

Past, Present and Future


- Highlights of Previous Workshops
 - 1990s through the 2000's
- Recent Workshop
- Timeline of last 1 ½ years
- Devils Lake Plan
- Projections & Commitments for 2010-2011

1991-1992

DEVILS LAKE WATER IMPROVEMENT DISTRICT OBJECTIVE 1992

1991 OBJECTIVE




Thompson Creek

- 
- file complaint on bacteria level
 - post warnings

1992 OBJECTIVES

1. Spot weed removal.
2. Grass carp restocking plan.
3. Collect information on ALUM (affix nutrients and sediment).
4. Waterfowl study reevaluation.
5. D River Park project.
6. Collect information on lakes with multi-purpose designations.

ON-GOING OBJECTIVES

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1. Sewering/septic maintenance.
 2. Algae control.
 3. Lake level control.
 4. Improve intergovernmental relations.
 5. Nutrient control.
 6. User conflict resolution.
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MANAGER'S JOB TARGETS

1995-96

1. Erosion and Sediment Control Ordinance w/ Lincoln City
2. Intergovernmental Agreement w/ Lincoln City.
3. Continue to work on Water Right for Devils Lake.
4. Promote forward progress on sewer expansion around the Lake w/ Lincoln City through Sewer Sub-committee.
- 5. Workshop on erosion/sediment control practices for local contractors after ordinance is passed.
6. Shoreline Development maps to identify important natural areas and future development potential.
7. Support City's efforts to develop impoundment in Side Creek.
8. Monitor Algae toxicity and coordinate w/ County Health Dept.

1996 Board Questionnaire

What are the 3 top priority problems in the lake?								
Weeds		3					=	1
Algae		1			2		=	2
Sediment	2		3	2	1	1	1	= 6
Shallowness					3		=	1
Septic	3	2		3			=	3
Shoreline disturbance			2		3		=	2
Waterfowl							=	0
Fish						3	=	1
Boats/jetskis							=	0
Clarity							=	0
Nutrients	1			1	2		2	= 4
Other:			X				=	1

GOALS and “DREAMS” for Devils Lake:

1. Improved Water Quality

Steps to Implement:

- A. Storm drain improvements
- B. Septic management district (nutrient trap system)
- C. Native vegetation along lake shore (and in front of existing seawalls)
- D. Reestablished vegetation and refuge areas for waterfowl and aquatic inhabitants. Restoration of healthy food chain.
- E. Non phosphate fertilizer requirement
- F. No additional shoreline protection (rip rap, sea wall)
- G. Increased enforcement and standards for erosion control
- H. Set backs required for building/improvements
- I. Encourage naturescaping (no lawns and no herbicide use)
- J. Native vegetation nurseries to form basis of recolonization

Summary 1999-2000

- Erosion Prevention & Sediment Control
- Sewering & Spill Reduction
- Stormwater Ordinance
- Monitoring—*E. coli*
- Education
- Outlet Structure Maintenance
- Grass Carp

Summary of high priority items for DLWID during 2000-2001

1. Erosion Prevention (In no particular order)

Phased Grass Carp Reduction and Revegetation Plan

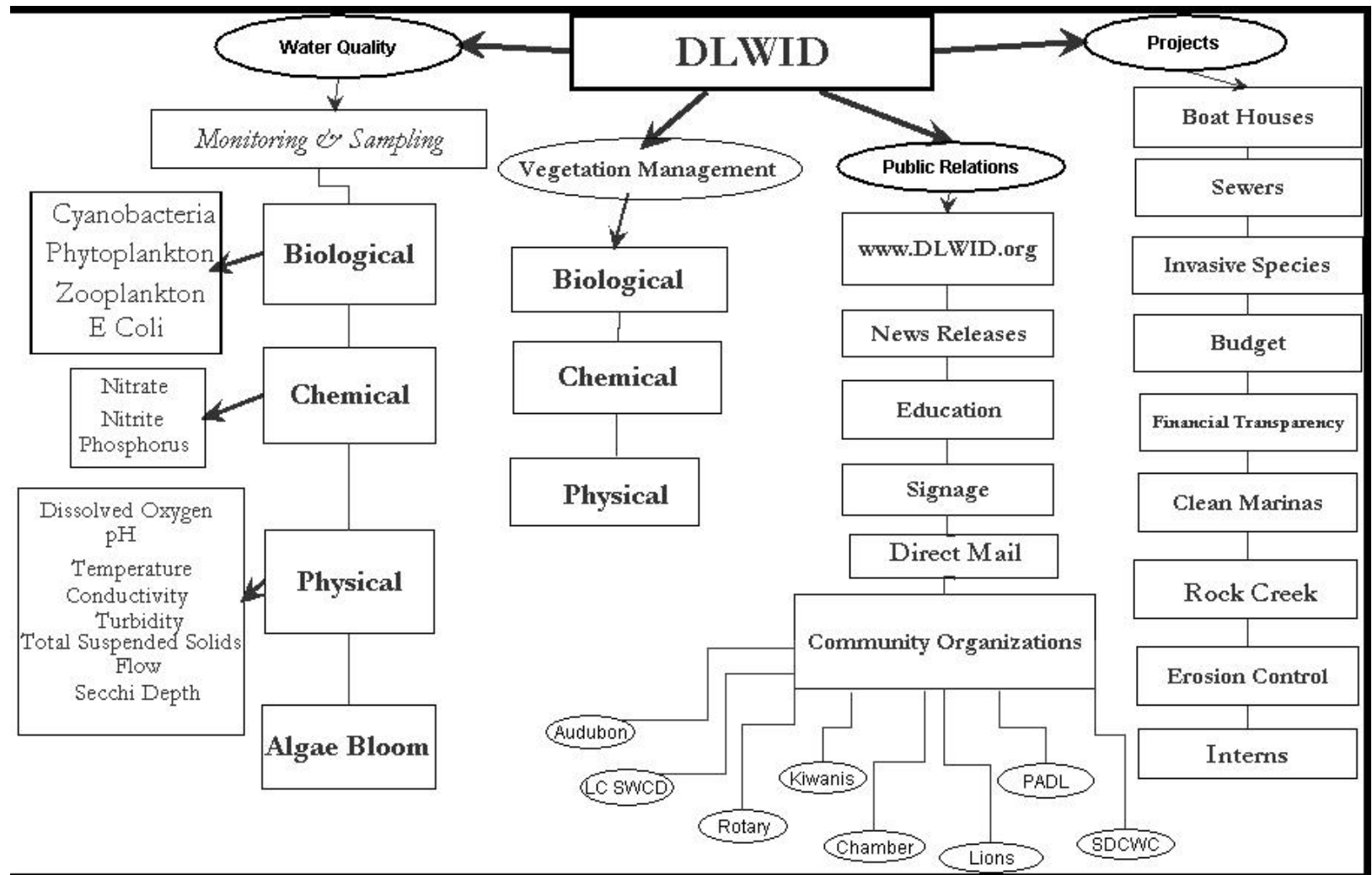
Education

Erosion Prevention & Sediment Control

Sewering and Reduction in Sewage Spills

Continue long-term monitoring program

Flow Chart 2005



Last Goal Setting Workshop

- Last Workshop: February 16, 2008
- Stakeholder Summit: July, 29, 2008
- FY 2009-2010 Goals: Retained FY 08-09

Incomplete

Partially Complete

Complete

Goals Identified (2008-02-16)

- Create Lake Management Plan – (Drafts & Revisions)
- Investigate grants for septic tank revitalization
- CAFÉ – identify parcels
- SolarBee Brochure
- Matching \$\$\$ for SolarBee
- Research Matching \$\$\$ for debris cleanup
- Research subsidizing Phosphate-Free Fertilizer

Actions Items

- ☑ Ongoing Monitoring
- ☑ Letter from the Chair to the City
- ☐ Boathouse/Boat Docks Standard --- (Ongoing)
- ☑ Monitor D River Dredging Permit Process
- ☑ Additional Signage
- ☑ Ongoing Outreach
 - ☑ Erosion Control Seminar, KBCH, Service Clubs
- ☑ SOLV, Senior Fair, “Get the Lead Out”
- ☑ Press Releases
- ☑ Purchase Cyanotoxin Monitoring Equipment

New Ideas, for consideration.

- Bioswales/Rain Gardens (PADL & City at HS Drive)
- Septic System Revolving Fund (DEQ & Shorebank)
- D River Dam Repair (Dam Improved)
- Intern (3 interns and 1 RARE participant to date)
- Large Debris Clean Up

Devils Lake Plan

Two phase approach

Formulate.....

- Draft Chapters and Objectives
- Hold Stakeholder Meeting
- Ongoing Board Input
- Consultant Additions

.....While Implementing

- SolarBees (Since 2006)
- Native Vegetation (Since 2007)
- DEQ Database & Model (Since 2008)
- Monitoring: Cyano-Watch and *E. coli* (Since 2006)
- Intern program (Since 2007)

Timeline – Summer 2008

- PLAN

- Chapters and Objectives Presented (May)
- Stakeholder Letters (May)
- 1st Draft (July)
- Stakeholder Meeting (July)
- Board Input (August - Ongoing)
- Plan revisions (Sept, Dec.)

Summer 2008

- SolarBees
 - ☑ Q & A with Joe Eilers of SolarBee
 - ☑ Ongoing Correspondence
- Native Vegetation
 - ☑ DSL & USACE removal/fill permit application
- ✕ Lake Level
 - ☑ Report to Water Resources
 - ☑ Airing of State's & Public's concerns
 - Campground flooding, erosion, loss of recreation, and saturated soils leading to sloughing

Fall/Winter 2008

- SolarBee
 - Presentations
 - ☑ Knud-Hansen & Eilers
 - Grant/Loan Research & Submittals
 - ☑ Cash Flow Analysis
 - ☑ EPA: West Coast Estuaries Initiative
 - ☑ SDAO Flex-lease
 - ☑ TLC: Loan Opportunities
 - ☑ NOAA: ARRA
 - ☑ DEQ revolving loan program

Fall/Winter 2008

- Native Vegetation
 - ☑ DSL Easement Application
 - ☑ Tetra Tech Contract Negotiations (Meeting at NALMS)
 - ☑ Removal/Fill permit refinements
 - ☑ NOAA Biological Assessment Submission
 - ☐ ODFW Concerns (Meetings and Communications)
 - ☐ Marine Board Concerns
- ✕ Lake Level
 - ☑ Emergency Dredging Conducted
 - ☑ Blog setup, voting irregularities
- ✕ DEQ Database & Model
 - ☑ Submitted

Spring 2009

- SolarBees
 - ☑ Revised Cost Proposal Received
 - ☑ Website Updated
 - ☑ Flier Distributed
 - ☑ Signage Put Out
- Native Vegetation
 - ☑ DSL/US ACE applications withdrawn

Spring 2009

- ✧ Lake Level
 - Water Resources Investigation
 - Staff Presentation
 - April Meeting/Decision
- ✧ DEQ Grant
 - Database Portion Awarded
- ✧ RARE Application: (Items chosen from Devils Lake Plan)
 - Septic Revitalization
 - Save our Shoreline (SOS)
 - Monitoring Support

Summer 2009

- SolarBees
 - ☑ May Meeting: Slideshow & Public Input
 - ☑ June Meeting: Decision
 - ☑ Further investigation Boating Hazards & Cyanobacteria
 - ☑ Funding Updates
 - ☑ Water Quality Updates
- Native Vegetation
 - ☐ ODFW Director
 - ☐ ODFW Newport

Summer 2009

- DEQ Grant: Database
 - Reformulation and resubmission
 - Coordination with Dr. Ford
- Lake Level
 - Dam set to 9.53' above MSL
 - Upgrades to wooden structure
 - Public's input

Summer 2009

- Monitoring
 - ☑ Internship
 - Hannah Nicholls
 - ☑ *E. coli*
 - ☑ Cyanobacteria
 - OSU Master Student Kara Hitchko
- ⊗ Other
 - ☑ RARE Interviews
 - ☑ Communication Committee Formed

Fall/Winter 2009

- SolarBees
 - ☑ Blue Lake Report
 - ☑ Hazards Report
- Native Vegetation
 - ☑ Tetra Tech Agreement
- Lake Level
 - ☑ Dam Removed for winter
 - ☑ Emergency Dredging

Fall/Winter 2009

- ⌘ RARE Program Starts
 - ☑ Seth Lenaerts
 - ☑ Septic Tank Revitalization Program
 - ☑ Save our Shoreline
 - ☑ Monitoring
 - ☑ Listserve
- ⌘ Nutrient Budget RFP
 - ☑ Created RFP
 - ☑ Received 1 response
- ⌘ Oregon Lakes Association
 - ☑ Sponsored & Hosted Annual Conference

Devils Lake Plan

I. Introduction

II. History

III. Current Status

IV. Intent and Reasons for Lake Management

V. Tools for Lake Management

VI. Funding Opportunities

VII. Implementation & Timelines

VIII. Assessment & Evaluation

Tools: External Controls

- Septic Tank Revitalization
- Stormwater Management
- Wetland Protection, Creation & Enhancement
- Shoreline and Riparian Vegetation
- Erosion Prevention and Sediment Control
- Sanitary Sewer
- Phosphorus Reduction
- Low Impact Development
- Toxicant Reduction & Abatement

Tools: Internal Treatments

- Whole Lake Circulation
- Native Vegetation
- Invasive Species Management
- Grass Carp

Tools: Research, Education & Outreach

- The Café
- Volunteerism
- Networking
- Website
- Signage
- Radio
- Television
- Newsprint

Projections & Ongoing Commitments for 2010-2011

- SolarBee
 - Evaluate Recent Findings
 - Establish Level of Priority
- Native Vegetation
 - Native Planting Guide (Tetra Tech)
 - Online Tools
 - Planting Projects
- Lake Level
 - Evaluate Last Year --- Establish Current year Protocol
 - Emergency Dredging Permit
 - Dam Maintenance --- Retiring Lake Contractor
 - RFP Excavator Contractors

Projections & Ongoing Commitments for 2010-2011

- RARE Program
 - Septic Tank Revitalization Program
 - Save our Shoreline
- Monitoring
 - E. coli
 - Cyanobacteria
 - Cyanotoxins
- BoatHouse/Docks
 - Second Hearing with County

Projections & Ongoing Commitments for 2010-2011

- Devils Lake Plan
 - Additions
 - Revisions
 - Consultant Input
 - Final Draft
- Nutrient Model
 - Simple Bathtub model

Projections & Ongoing Commitments for 2010-2011

- Outreach
 - ▣ Website
 - ▣ Listserve
 - ▣ Water Bill Announcement
 - ▣ Radio, KBCH and Low Power
 - ▣ Conferences, NALMS & OLA
 - ▣ SOLV
 - ▣ Get the Lead Out
 - ▣ Lake Steward Award
 - ▣ Senior Fair
 - ▣ Earth Day

Projections & Ongoing Commitments for 2010-2011

- DEQ Database
 - QAPP & SAP
 - Data Entry
 - Database formulation
- Property Issues
 - Site Plan reviews
 - Water Right Applications
 - Wetland Removal/Fill
 - Complaints

Projections & Ongoing Commitments for 2010-2011

- Financials
 - ▣ Audit
 - ▣ Budget
 - ▣ Accounting
 - ▣ Tax Reporting
- Affiliations and Partnerships
 - ▣ PADL, OLA, SDCWC, Lincoln SWCD
 - ▣ Local, State, Federal & Tribal Gov'ts