

Northstar Pond Public Outreach Meeting #2

April 6, 2015

Northstar Pond Public Meeting

April 6, 2015 - Veterans Memorial Center, Davis, CA

Agenda:

- 6-6:15 – Community Survey Results
- 6:15-6:45 - Presentation
- 6:45-7:05 - Questions
- 7:05-7:30 - Public Input
- 7:30 – Meeting End



Introductions

Christine Helweg – City of Davis

Kerry Daane Loux – City of Davis

Mike Blankinship – Blankinship & Associates, Inc.

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Our Approach So Far

- Blankinship Conducted Investigation:
 - Gathered historic information
 - Obtained information on wildlife
 - Surveyed vegetation
 - Collected water quality samples and water depth measurements
 - Collected sediment samples and sediment depth measurements
- First Public Meeting on March 9, 2015
 - Presented some of the findings from investigation
 - Gathered input on pond management
 - Announced Public Survey

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Public Survey

- Used public input to help develop priorities

Northstar Pond Community Survey Results

Item Number	Topic	Ranking Score
1	Enhance and maintain wildlife habitat as part of the overall pond management objectives	8.15
2	Enhance and maintain the overall water quality (i.e. clarity, odor, fish habitat)	7.69
3	Enhance and maintain the overall appearance and aesthetics	6.5
4	Manage invasive, non-native shoreline and island plants (i.e. flag iris, palm tree)	6.48
5	Manage aquatic plants (i.e. algae)	6.04
6	Enhance the water quality/seasonal supply connection between the upper Northstar Pond and the adjacent Lake Parkside Wildlife Pond	5.67
7	Continue use of water features as currently operated	4.31
8	Enhance and maintain public safety related to public access in and around the pond area	4.08
9	Provide more public amenities (i.e. benches, walkways around pond, interpretative signage)	3.33
10	Other: Please provide more information on your specific topic(s) of concern in the comment box below if not already identified in the previous questions.	2.75

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Top Priorities

Survey Says...
Enhance and Maintain:

- Wildlife Habitat
 - Water Quality
 - Appearance & Aesthetics
- and
- Manage Vegetation/Algae

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How Do We Get it Done?

Enhance & Maintain:	Aerate & Circulate	Remove Sediment	Manage Plants	Bird Boxes & LWD	Manage Nutrients
Wildlife Habitat	✓	✓	✓	✓	
Water Quality	✓	✓	✓		✓
Appearance & Aesthetics	✓	✓	✓	✓	✓
Vegetation & Algae	✓	✓	✓		✓

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Benefits of Aeration & Circulation

- Disturbs algae: slows growth, opens up water for waterfowl use, improves aesthetics
- Increases oxygen: better for aquatic organisms and may decrease odor
- Prevents stagnation: improves clarity and aesthetics

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Benefits of Sediment Removal

- Allows for water flow: reduces odors
- Removes substrate: reducing availability for future plant growth
- Deepens and cools water: allowing more dissolved oxygen and improving aquatic organism habitat

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Benefits of Managing Plants

- Allows for water flow: Cooling water and allowing more dissolved oxygen, improves clarity and aesthetics; reduces odors, disturbs algae and improves aquatic organism habitat
- Improves air flow to enhance mixing which disturbs algae & improves oxygenation
- Slows future sediment build up that would otherwise slow flow, etc.

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Benefits of Bird Boxes & Large Woody Debris (LWD)

- Enhances existing habitat at the Partansky Pond
- Provides additional nesting at the Northstar Pond
- LWD provides habitat enhancement by increasing habitat areas

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Benefits of Managing Nutrients

- Reduces plant growth, which in turn can:
 - Reduce odors
 - Improve aesthetics
 - Enhance habitat

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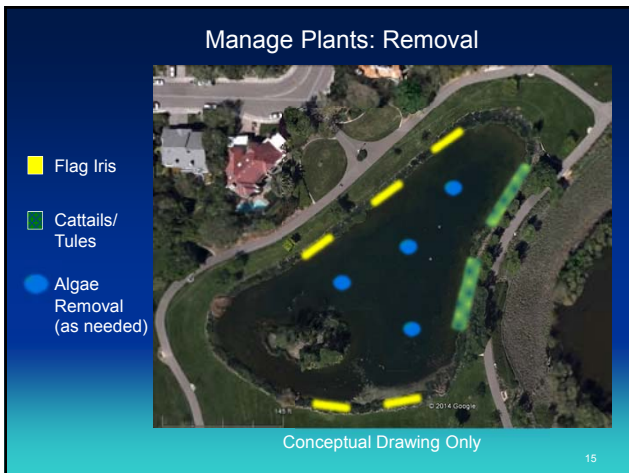
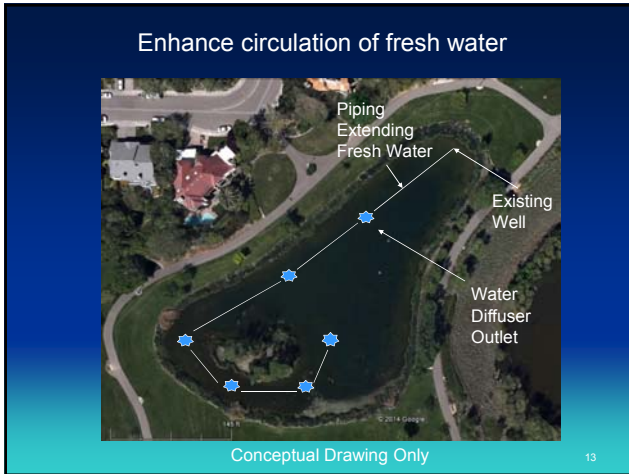
Evaluate/Repair/Replace/Enhance Aeration



Conceptual Drawing Only

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Manage Plants: Nutrient Control

Floating Plant Islands



Conceptual Drawing Only

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Manage Plants: Nutrient Control

- **Floating Plant Islands**
 - Harvests nutrients otherwise used by algae
- **Phosphorus Binding**
 - Limits algae food supply
- **Turf Buffer Strips**
 - No fertilizer use limits algae food supply



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Tools of the Trade: Mechanical Vegetation Management



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Mechanical Vegetation Management



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Manual Vegetation Removal



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Habitat Enhancement



Image source:
<http://www.kingcounty.gov/environment/waterandair/nd/shorelines/about/shoreline-ecology/large-woody-debris.aspx>

Image source: <http://www.floatingislandswest.com/photo-gallery/category/3-wastewater-stormwater>

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Aeration



Image source: <http://eoperation.com/special-applications/>



Image source:
<http://www.thepondreport.com/store/diffuser-disc>



Image source: <http://www.kasco-fountains.com/k35.html>

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Next Steps

- Rank and Provide Range of Cost Estimates to:
 - Recreation and Park Commission
 - City Council
- Put Plan into Action

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What We Covered

- Priorities
- Approach Options Being Considered
- Next Steps



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Questions?



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