

**Environment and Natural Resources Trust Fund  
2011-2012 Request for Proposals (RFP)**

---

**LCCMR ID: 060-B**

**Project Title:** Schmidt Lake Restoration

---

**Category:** B. Water Resources

---

**Total Project Budget: \$** \$425,000

**Proposed Project Time Period for the Funding Requested:** 2 yrs, July 2011 - June 2013

**Other Non-State Funds: \$** 50,000

---

**Summary:**

Restore Schmidt Lake (Impaired water) Install treatment ponds/chambers on stormwater pipes draining into the lake, excavate sediment to pre-development depths, monitor water quality. Get off impaired waters list.

---

**Name:** Jamie Page

**Sponsoring Organization:** Schmidt Lake Association

**Address:** 12005 49th Place N  
Plymouth MN 55398

**Telephone Number:** 763-519-0111

**Email** jamiepage@comcast.net

**Web Address** \_\_\_\_\_

---

**Location**

**Region:** Metro

**Ecological Section:** Minnesota and NE Iowa Morainal (222M)

**County Name:** Hennepin

**City / Township:**

---

_____ Funding Priorities	_____ Multiple Benefits	_____ Outcomes	_____ Knowledge Base
_____ Extent of Impact	_____ Innovation	_____ Scientific/Tech Basis	_____ Urgency
_____ Capacity Readiness	_____ Leverage	_____ Employment	_____ TOTAL _____%

# 2011-2012 MAIN PROPOSAL

**PROJECT TITLE: Schmidt Lake Restoration**

**I. PROJECT STATEMENT**

1. *We intend to restore Schmidt Lake in Plymouth. A headwaters lake in the Shingle Creek Watershed. It is eutrophic as are many metro lakes. We have tried bacterial treatment, aeration, worked with DNR on innovative plant management, rain gardens, shoreline restoration, storm drain marking and watershed education. They all help but we cannot fix the lake without this next step. This restoration will be a learning experience for our state as we look for ways to restore other eutrophic lakes with small developed watersheds.*
  
2. *We will stop direct discharge of storm water into the lake and remove storm drain deposited sediment to bring the lake back to pre-curb and gutter depths. By intercepting storm drains and treating stormwater the continual delivery of nutrients, toxins and sediment into the lake will be dramatically reduced.*
  
3. *Below ground chambers or above ground ponds will be inserted into storm drain system to capture solids. Removal of bottom sediments deposited by storm drain discharge to lake. Continue to monitor water quality to document restoration effectiveness on lake ecosystem.*

**II. DESCRIPTION OF PROJECT ACTIVITIES**

**Activity 1: Intercept pipe draining through Schmidt Lake Park Budget: \$50,000**

*To reduce sediment, nutrient and toxins from entering lake from this subwatershed*

<b>Outcome</b>	<b>Completion Date</b>
<i>1 Determine drainage area, volume and size of required pond.</i>	<i>Fall 2011</i>
<i>2 Design above ground treatment pond in City Park</i>	<i>Winter 2011</i>
<i>3 Work with City for exact pond location</i>	<i>Spring 2012</i>
<i>4 Install pond</i>	<i>Spring 2012</i>

**Activity 2: Intercept pipes draining to Schmidt Lake Budget: \$ 200,000**

*To reduce sediment, nutrient and toxins from entering lake from the majority of the watershed*

<b>Outcome</b>	<b>Completion Date</b>
<i>1 Determine drainage area, volume and size requirements of underground treatment chamber</i>	<i>Summer 2011</i>
<i>2 Select appropriate underground chambers for flow/volume</i>	<i>Fall 2011</i>
<i>3 Determine sites for underground treatment chambers</i>	<i>Spring 2012</i>
<i>4 Obtain landowner permission (City or private)</i>	<i>Spring 2012</i>
<i>5 Install chambers</i>	<i>Fall 2012</i>

**Activity 3: Remove sediment from lake to pre-curb and gutter levels Budget: \$200,000**

*To remove storm drain delivered sediment from lake bottom*

<b>Outcome</b>	<b>Completion Date</b>
<i>1 Obtain map of sediment levels</i>	<i>September 2011</i>

2 Obtain map of current depths	September 2011
3 Excavate sediment to restore natural lake contours. Dependent on ice thickness	Winter 2011 or 2012
4 Dispose of bottom sediments according to MPCA guidelines.	Winter 2011 or 2012

**Activity 4: Monitor lake Budget:** \$ 5,000 per year for two years

*Determine if the restoration actions had improved lake health and to what degree*

Outcome	Completion Date
1 Continue to monitor lake in a manner consistent with on current monitoring program	July 2013
3. Report monitoring results	July 2013

**Activity 5: Program administration and reporting Budget:** \$ 20,000

*Determine if the restoration actions had improved lake health and to what degree*

Outcome	Completion Date
1 progress reports (twice a year) and final report	July 2013
2 Hire subcontractors, keep project running on time, communication with all partners, track expenditures, pay bills, track match, work with volunteers	July 2013

### III. PROJECT STRATEGY

#### A. Project Team/Partners

*Schmidt Lake Association – Is the project lead and general contractor for the project. The Schmidt Lake Association will be responsible for accomplishing all of the items listed above within the project budget and timeframe. The Schmidt Lake Association has no staff and will subcontract out all of the work. The Schmidt Lake association will contribute \$50,000 of cash towards the project and \$10,000 of in-kind time by its board and members.*

*City of Plymouth – Support this effort but have not officially donated to the project.*

*Shingle Creek WMO – Support this effort but have not officially donated to the project.*

#### B. Timeline Requirements

*Two year project. Analysis of data and design work for all three construction components will begin once project is awarded. Implementation date of stormdrain interceptors will be based on landowner or city permission for installation of devices and suitable weather for construction. Sediment removal will be based on ice thickness. Not sure which winter will provide adequate ice thickness. Monitoring and reporting will be throughout project.*

#### C. Long-Term Strategy and Future Funding Needs

*There is no future funding needs. The Lake association will continue to monitor the lake. The lake will likely be taken off of the federal list of impaired waters.*

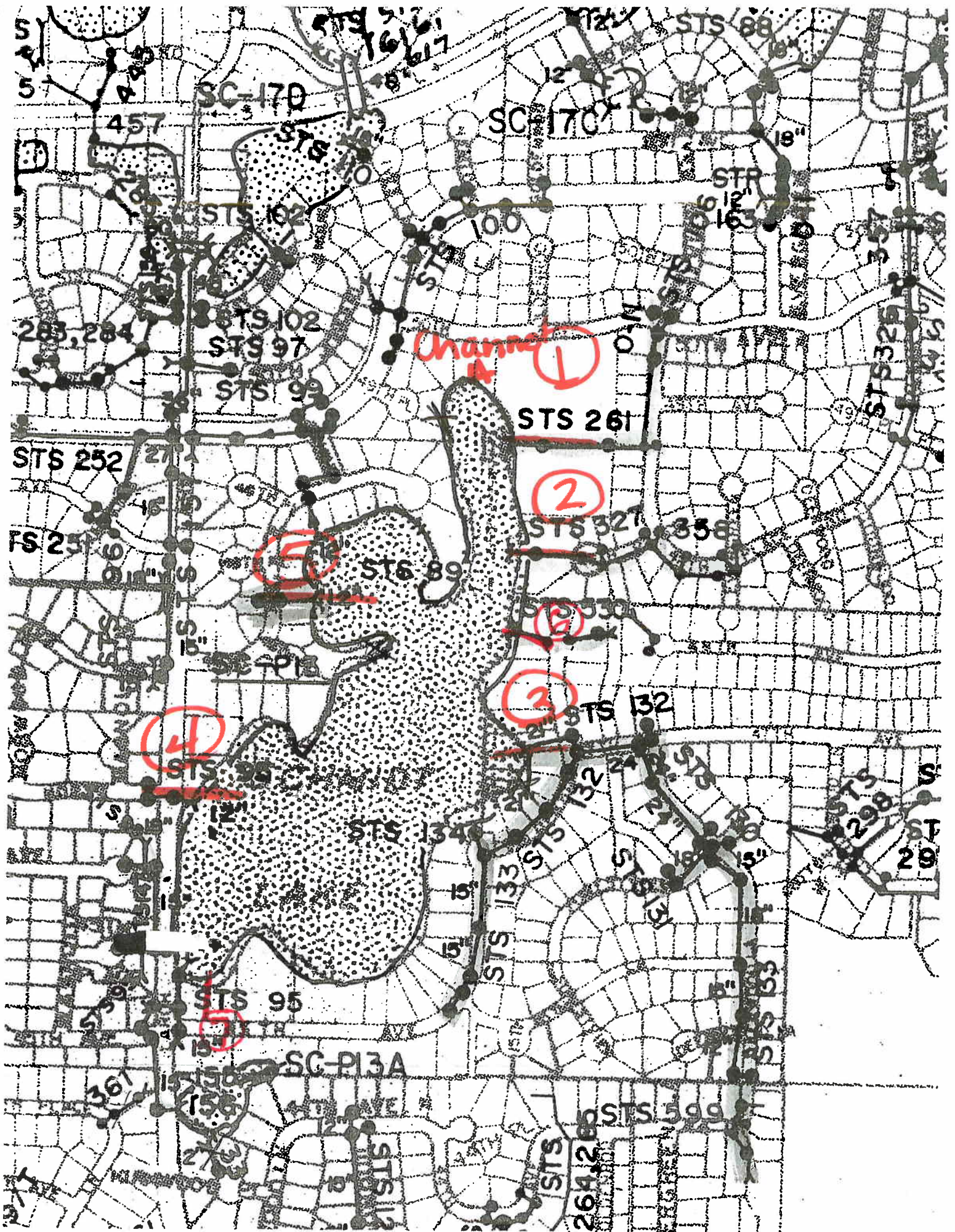
## 2011-2012 Detailed Project Budget

### IV. TOTAL TRUST FUND REQUEST BUDGET 2 years

<b>BUDGET ITEM</b> <i>(See list of Eligible &amp; Non-Eligible Costs, p. 13)</i>	<b>AMOUNT</b>
<b>Personnel:</b>	\$0.00
<b>Contracts:</b> Pond Design, chamber design - contractor not selected	\$ 20,000
<b>Contracts:</b> Pond installation, chamber installations, excavation - Stienbrecher	\$ 380,000
<b>Contracts:</b> Monitoring assistance - Contractor not selected	\$ 5,000
<b>Contracts:</b> Program reporting - Fortin Consulting Inc	\$ 10,000
<b>Contracts:</b> Program Administration - Contractor not selected	\$ 10,000
<b>TOTAL ENVIRONMENT &amp; NATURAL RESOURCES TRUST FUND \$ REQUEST</b>	<b>\$ 425,000</b>

### V. OTHER FUNDS

<b>SOURCE OF FUNDS</b>	<b>AMOUNT</b>	<b>Status</b>
<b>Other Non-State \$ Being Applied to Project During Project Period:</b> <i>Schmidt Lake Association</i>	\$ 50,000	<i>Secured</i>
<b>In-kind Services During Project Period:</b> <i>Schmidt Lake Association - Water quality monitoring, Private property access for sediment removal, boat use for monitoring. Communication with Lake Association members and Schmidt Lake Watershed residents. Website updates, General project help where needed.</i>	\$ 10,000	



## **Project Manager Qualifications and Organizational Description**

### **Project Manager**

Jamie Page is the volunteer project manager and contact person for this grant application. He has lived on Schmidt Lake for 6 years. He has been active in the lake association as a board member or block captain for 5 years. He has have run many projects in his professional career varying in size and scope from quite small to multiple million dollar budgets, dozens of resources and very complex in scope. Jamie is a CIO of a \$375 million privately held company. He runs many projects each year.

It is the goal of the Schmidt Lake Association to contract out project administration. Jamie along with the board will select a qualified person to run this project. At this time the paid project administration person has not been selected. Until this happens Jamie will be in charge and will always stay as the main contact between LCCMR and the Schmidt Lake Association.

### **Organizational Description**

Schmidt Lake Association is a neighborhood organization. Its members are primarily the property owners along Schmidt Lake. The organization has annual dues of \$300 and extra fees for special projects. The participation rate is very high with over 90% of homeowners as paid in full members. The organization has been in existence for over 20 years and has been very active in DNR pilot projects and other innovative projects to improve lake water quality and engage citizens in pollution prevention efforts. It is run by an elected board of directors and operates by the organizations bylaws.