# Medicine Lake Excess Nutrients TMDL Development

## Project Tasks and Timeline

### Task 1: Past Study and Existing Data Review, Analyses, and Summary (Three Rivers Park District)

1. Prepare written summary of past Medicine Lake Watershed studies (2008)
2. Prepare graphs and tables depicting past and current lake water quality data (2009)
3. Prepare graphs and tables summarizing hydrologic and nutrient loading quantities from inflow streams (2009)
4. Summarize on-going and completed BMP installment in the watershed (2009)
5. Summarize recommended management activities from previous Medicine Lake Watershed studies (2009)

### Task 2A: Watershed Modeling (LimnoTech)

1. Convert existing P8 models to Windows-based version [3.4 or newer] (2008)
2. Modify subwatersheds to reflect MS4 boundaries, new subwatershed divides, newly added BMPs (2009)
4. Prepare technical memorandum to discuss modeling results, etc. (2009)

### Task 2B: In-Lake Modeling (Three Rivers Park District)

1. Update BATHTUB model using new P8 results for BMP effectiveness (2008)
2. Estimate lake water quality response to proposed management activities (2009)
3. Complete final report with tables and graphs depicting lake response to proposed improvement options (2009)

### Task 3: Stakeholder and Public Participation Process (CR Planning)

1. Project initiation, project management, and coordination with project team (2008)
2. Form Citizen-Stakeholder-Technical Advisory Committee, develop a meeting timeline (2008)
3. Coordinate and facilitate Citizen-Stakeholder-Technical Advisory Committee meetings and trainings (2009)
4. Additional facilitation time outside of the scheduled meetings (2009)
5. Develop outreach media and prepare a final summary of the stakeholder process (2009)

### Task 4: Evaluate Improvement Options/Develop Allocations and Implementation Plan (LimnoTech)

1. Model and evaluate watershed and in-lake improvement options (2008)
2. Review implementation costs and benefit estimates (2009)
3. Develop final allocations and watershed allocations (2009)
4. Update existing Medicine Lake Implementation Plan (2009)

### Task 5: Develop Monitoring Plan (Three Rivers Park District)

1. Prepare summary report of on-going monitoring activities and recommendations for a long term monitoring (2008)

### Task 6: Write Draft and Final TMDL Report (LimnoTech)

1. Prepare Draft TMDL report for stakeholder and MPCA review and comment (2008)
3. Prepare Final TMDL report for submission to EPA (2009)