Medicine Lake Excess Nutrients TMDL project: Modeling Status

Steering Committee Meeting #4
April 9, 2009
Presented by: Hans Holmberg, LimnoTech

Photo by: Terrie Christian—President, AMLAC
Watershed Modeling Status

- Refinements made based on input from cities
- Updated with recent rain data
- Preliminary calibration complete
  - In the ballpark, but not fully satisfied
- Beginning to apply to assess opportunities for reductions
Medicine Lake TMDL

Plymouth Creek:
- 6,655 lbs TP in runoff
- 1.06 lbs/acre/yr
- 2,248 lbs delivered to lake
- 0.359 lbs/acre/yr
- 64% removal currently

Ridgedale Creek:
- 1,343 lbs TP in runoff
- 0.93 lbs/acre/yr
- 673 lbs delivered to lake
- 0.467 lbs/acre/yr
- 50% removal currently

Other “Direct” Watershed Area:
- 1,883 lbs TP in runoff
- 0.689 lbs/acre/yr
- 1,249 lbs delivered to lake
- 0.455 lbs/acre/yr
- 34% removal currently

Literature: 0.7 to 1.4 lbs/acre/yr

P8 Simulation 2006 water year
Next Steps

- Continue model refinements
- Apply model to assess most cost-effective means of reducing P
Questions???

Photo by: Terrie Christian—President, AMLAC