

Tactical Basin Plans – Phase II of the Lake Champlain P TMDL

- Where do highest Phosphorus loads originate? - Location of P loading (by catchment or HUC 12) and by sector (agriculture, forestry, urban stormwater, roads)
- How much of the Phosphorus load could be reduced in the basin to meet TMDL allocations?
- How much Phosphorus reduction could be required for each landuse?

Table 6 - PERCENT LOAD REDUCTIONS NEEDED TO MEET TMDL ALLOCATIONS⁹

Lake Segment	Total Overall	Wastewater ¹	CSO	Developed Land ²	Agricultural Production Areas	Forest	Streams	Agriculture Nonpoint
1. South Lake B	41.4%	0.0%		21.1%	80.0%	40.0%	46.7%	62.9%
2. South Lake A	55.5%	0.0%		18.1%	80.0%	5.0%		62.9%
3. Port Henry	55.4%			7.6%	80.0%	5.0%		62.9%
4. Otter Creek	23.6%	0.0%		15.0%	80.0%	5.0%	40.1%	46.9%
5. Main Lake	20.5%	61.1%		20.2%	80.0%	5.0%	28.9%	46.9%
6. Shelburne Bay	11.6%	64.1%		20.2%	80.0%	5.0%	55.0%	20.0%
7. Burlington Bay	31.2%	66.7%	11.8%	24.2%	0.0%	0.0%		0.0%
8. Malletts Bay	17.6%	0.2%		20.5%	80.0%	5.0%	44.9%	28.6%
9. Northeast Arm	12.5%			7.2%	80.0%	5.0%		20.0%
10. St. Albans Bay	24.5%	59.4%		21.7%	80.0%	5.0%	55.0%	34.5%
11. Missisquoi Bay	64.3%	51.9%		34.2%	80.0%	50.0%	68.5%	82.8%
12. Isle LaMotte	11.7%	0.0%		8.9%	80.0%	5.0%		20.0%
TOTAL	33.7%	42.1%	11.8%	20.9%	80.0%	18.7%	45.4%	53.6%

¹Percent change from current permitted loads

² Includes reductions needed to offset future growth

How is Phosphorus Reduction Goal Met?

$$\text{TMDL} = \text{WLA} + \text{LA} + \text{MOS}$$

Total Maximum Daily Load
(Total Loading Capacity)

Wasteload Allocation
("Point Sources")

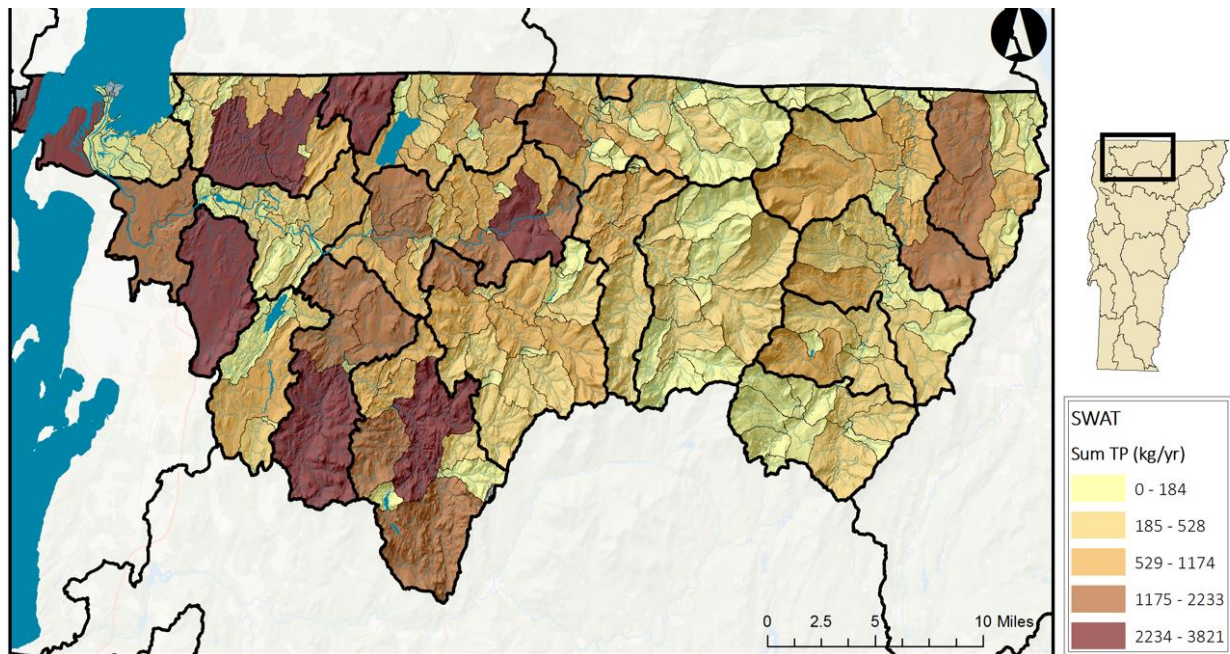
Load Allocation
("Nonpoint sources")

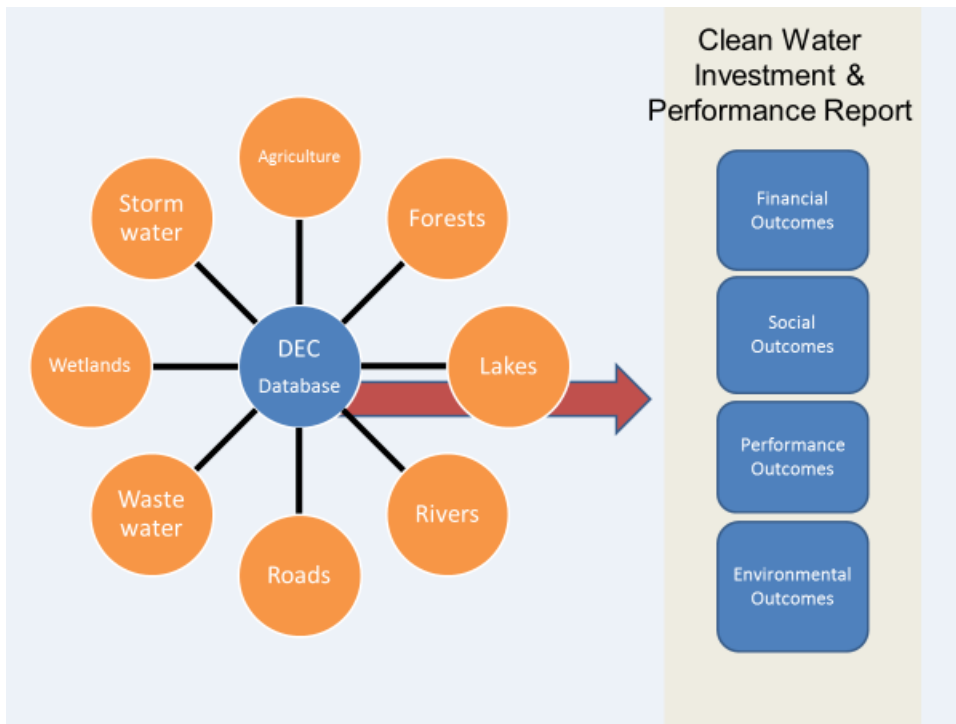
Margin of Safety

Accounts for
uncertainty.

The Vermont Clean Water Act (Act 64, 2015) and the Vermont Phase 1 Lake Champlain Phosphorus TMDL Implementation Plan

- Agricultural Water Quality Management
- Impervious Surface Stormwater Management
- Road-related Stormwater Management
- River Corridor Protection and Restoration
- Forest Management
- Increased Fees & New Positions
- Clean Water Fund





Future Phase II plans

Future iterations of the Tactical Basin Plan will provide augmented specificity in regards to phosphorus reductions achieved, reductions planned, costs, and as appropriate, success stories documenting incremental water quality improvement