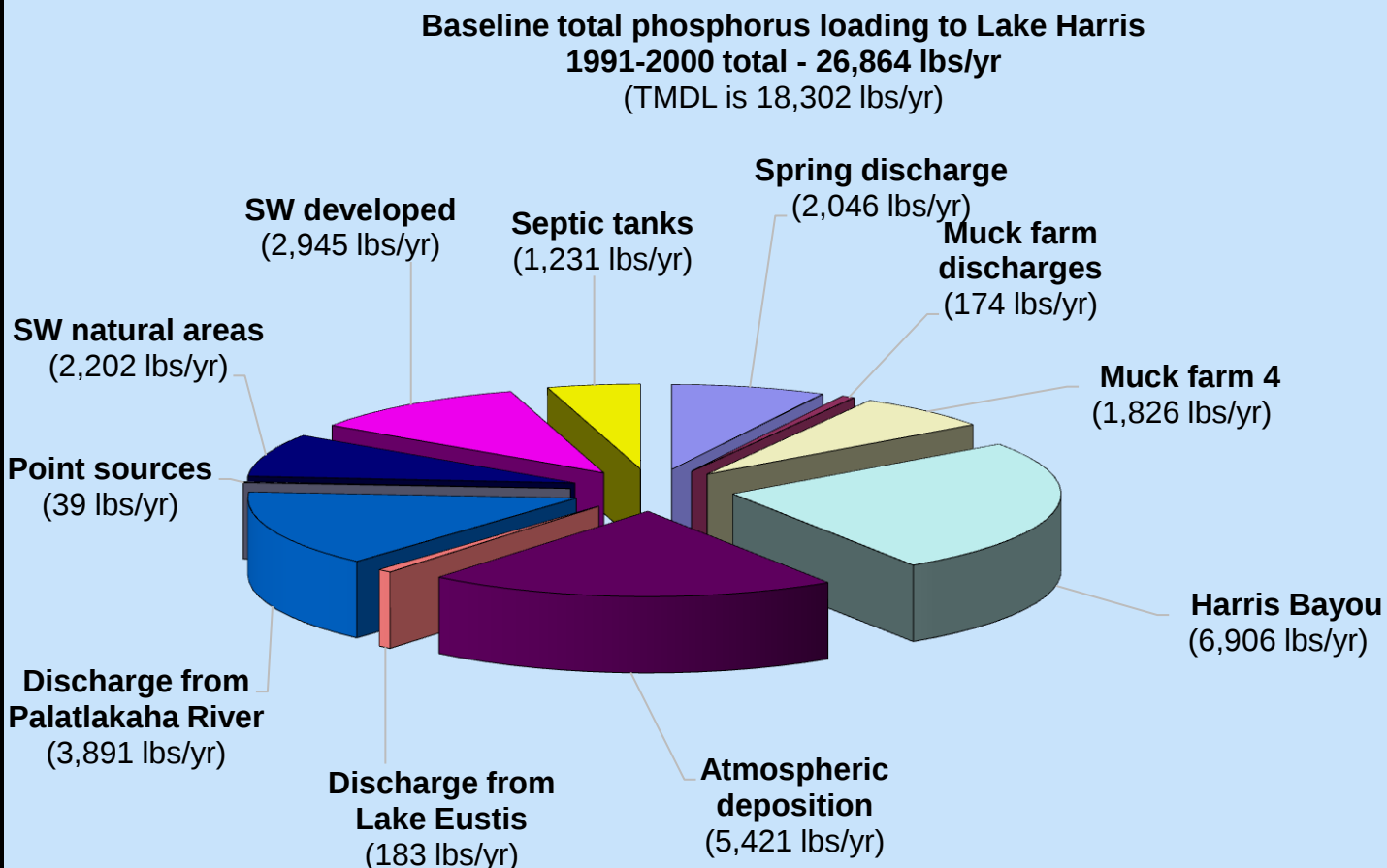


Planning for the future

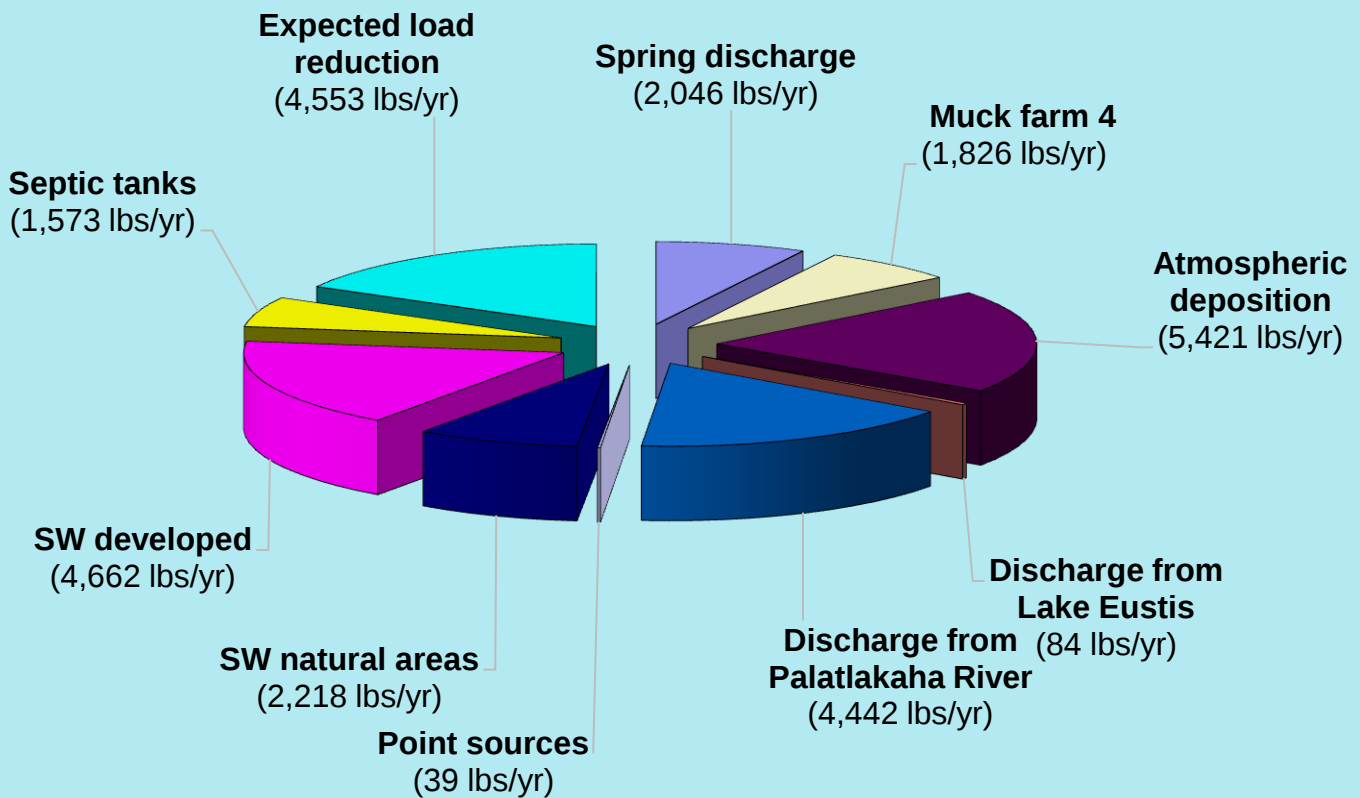
- TMDLs based on 1991-2000 loading estimates which is baseline
- Required reductions in TP loading based on baseline loading calculated for 1991-2000 and difference from existing loading
- Example pie chart for Lake Harris

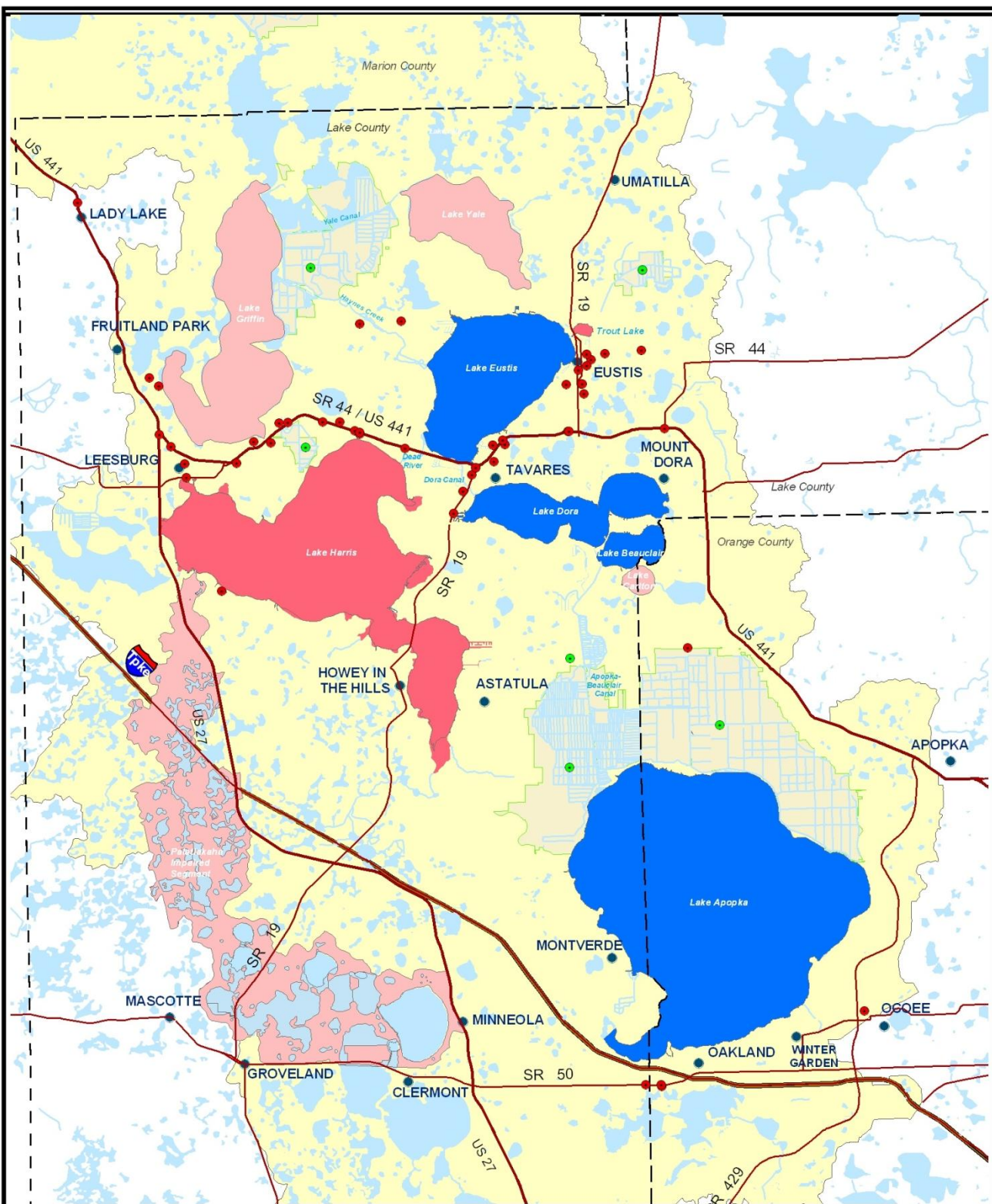


Nutrient budgets for each impaired waterbody included:

1. An estimate of load reductions from projects completed by end of 2005
2. Estimate of projects underway beyond 2005
3. Estimate of loadings from future growth through 2010.
4. Lake Harris example table

Expected net total phosphorus loading to Lake Harris
BMAP total - 22,311 lbs/yr
(TMDL is 18,302 lbs/yr)





Upper Ocklawaha Basin

0 1 2 3 4 5 Miles



Map prepared July 23, 2007 by the
Bureau of Watershed Management,
Division of Water Resource Management.
Map is intended for display purposes only.

Legend

Type of Project

- Quantified BMP
- Restoration
- Restoration Areas

Status after BMAP Project Implementation

- Projected to meet TMDL after BMAP implementation
- Projected to be close to TMDL after BMAP implementation
- Projected to need significant additional reductions after BMAP implementation

Why update the nutrient budget?

- Projects adopted with BMAP have been completed or will be by end of 2010.
- Gives us the opportunity to compare expected loadings with observed
- Land use changes have occurred. Some sources may have changed or been reduced as a result or new sources added
- Opportunity to focus on waterbodies that will not meet TMDLs and fine tune activities to address those waterbodies

- Provide more thorough accounting for source loading reductions

1. Some projects did not have loading reductions associated with them
2. Level the playing field! For Lake Jesup and the Lower St. Johns municipalities have been given credit for potential loading reductions from street sweeping, baffle boxes, public education and outreach activities, and ordinances

Revised nutrient budget

- 2001-2010 based on observed data
 - Allows comparison to 1991-2000 budget
 - Add new projects
 - Proposed projects for beyond 2010
 - Credit projects not included in BMAP
 - New projects or older projects
 - What information do we need to know?
1. Parts of the nutrient budget
 2. Location of septic systems
 3. Wastewater discharges, spills, and runoff

Future TMDLs in the Upper Ocklawaha

- New verified list in 2012
 - Probably include changes in criteria
 - Helps to sync up BMAP and watershed cycle
 - May add parameters to existing waterbodies with TMDLs or add new waterbodies
 - Such as happened with the 2008 list during last cycle
1. Haynes Creek – fecals
 2. Lake Denham – nutrients and DO
 3. Lake Weir, Johns Lake, Silver Lake, Lake Joanna, Lake Cherry, Lake Bryant – nutrients

- 
4. Little Creek and Big Creek – DO
 5. Silver River and Silver Springs – nutrients
 6. Lake Louisa, Trout Lake, Lake Eustis, Dora Canal – DO
 7. Ocklawaha River – DO and nutrients
 8. Lake Harris Outlet and Non contributing area - nutrients

What's our game plan?

- Propose higher priority for Lake Denham and Cherry Lake TMDL development
 1. They are TP sources for Lake Harris
- Timing of TMDLs
- Where do these TMDLs fit in the BMAP process?