Pearly Pond Mgmt Plan Steering Committee Meeting

Meeting Minutes 10/10/2014
Attendees: Anne Evans, Catherine Koning, Paul Kotila, Ben Lundsted, Fred Rogers, Phil Simeone

Phil reported that the interim town planner for Rindge was not able to attend this meeting but will try to be at the public meeting on Nov. 21

Ben reported that he has been trying to get in touch with Mike Cloutier, Rindge road agent, to discuss the BMPs that would fall under his department. No luck so far but will keep trying.

Best Management Practices (BMPs) for Stormwater:

- Ben presented a document that explained how the BMP costs are estimated, in other words what will be in the report.
- They use a range of cost estimates, if we apply for funding to implement the plan we should use the high end of the cost estimates, important because costs tend to go up over time, and it is easier to go under budget than over budget.
- The high end of the cost estimates is used to compare BMPS
- Each BMP will have cost estimates broken down to make it easier to do the cost share in the next grant application (e.g., labor may be able to be provided as the match/cost share). All cost breakdowns for each BMP will be included in the appendix
- Operations and maintenance (O&M) costs are also included, on an annual basis, for 10 years. So the phosphorus removal shown in the estimates is for 10 years. Operations and Maintenance cannot be included in implementation grants, except during the time of the grant which is typically 2-3 years
- Can sort of expect to have rolling grant contracts for several BMPs

Review of each stormwater BMP shown on the "Pearly Pond Potential BMP" document, handed out several meetings ago. Ben handed out some photos that go along with the Powerpoint

1. FPU campus/boat house and fields:
- Handles lots of stormwater and is right by the lake
- Drainage from fields and University drive would go into a gravel wetlands system on the east side of the road. Can make this look like a meadow, a garden, many options.
- Designed to have 2-3 compartments or cells, to make the water go anaerobic (no oxygen), aerobic, then anaerobic again. Most treatment occurs subsurface. Long narrow shape. Drains under road to gravel ditch around the boathouse
- Good opportunity for research and education, include signs etc explaining what it is and how it helps the lake. Note: Catherine would like to have sampling wells in each cell for teaching purposes
- On gravel parking lot by boathouse, stabilize the area with porous pavers can be concrete pavers or geogrids of HDPE plastic - planted over with grass
- Put rain garden on edge of parking lot - landscape in berms/depression for infiltration
- Could tie in roof drainage from Lakeview classroom. Boat house drains into gravel ditch now.
2. FPU East parking lots
   - Direct stormwater into "islands" planted with trees. Underneath is coarse crushed stone bedding and filter at bottom for water storage. Crushed stone on top - prevents clogging with sediments. Can use existing underground piping to tie to a catch basin.
   - Designed for 1" storms, this first part of a rainstorm washes the majority of the pollutants. Once it is overflowing, it goes to the existing underground drainage pipe system
   - Plant material takes up P. With trees, no need to harvest the plants and there is more shade in the parking lot.
   - O&M: Tree boxes need cleanout 1-2 times per year, Tree pits need cleaning 3-5X per yr
   - Clean out: Lift grate out, dump sediment into truck. Catch basins need vacuuming with specialized vacuum trucks. Rain gardens, need shoveling by hands.
   - In implementation grant, persons resp. for O&M need to be identified. Management workshop emphasized the need to provide training for maintenance personnel, there are starting to be more special events to do this. Same for plowing.

3. Rte 119
   - DOT would have to get on board for this one. They would most likely do it the next time the road needed work.
   - Right now there is no treatment for the water coming off the road. Idea is to add a plunge pool/sediment trap. Not much space there but this would help.
   - Retrofit the drainage swale with rock check dam, rock/gravel underneath, dams slow the water down so sediment drops out and phosphorus with it.
   - Talk to environmental personnel at DOR - talk to when applying for implementation grant.

4. Kimball Rd. - sharp corner.
   Town owned. Install wet pond with low flow channel - constructed wetland. See powerpoint.

5. Kimball Rd. - Beach access.
   - Most popular access to lake. Town owned, PPA maintains it. Mostly just neighbors use it. Not an official boat launch.
   - Use porous pavers or geoblox to stabilize parking area/driveway. Rain gardens would catch runoff, drain to outlet piping.
   - Also would be a great spot for educational signs etc. since people go there.

   - Hard to stabilize gravel swale along the road - it is very deep. Geoblox with vegetation can stabilize the edge. Too shady to grow grass, a tricky spot.
   - FPU parking lot drainage goes across road, is creating very deep gully on Rice property (owner of A-frame house). Difficult to stabilize the steep slope there, hard to get large equipment in. Need to get good contractors.
   - Use reinforcement, bioengineered slope treatment - rolls of bio-textiles planted with willows.
   - Don't know how much of the land is in the road right of way, how much is on private property.
9. Ingalls Rd. inlet/lg culvert
- Could install stabilized culvert end with level spreader - pool with dam on downstream side (see photos). But dam would prevent fish passage. Not deep enough on downstream side to create area for the Floating Treatment Wetlands - that would have to go on the upstream side.

10. Kimball Rd. - gravel turnaround. Private road, owned by several landowners.
- Re-grade road to redirect drainage. Porous pavers. Or just pave it and send water to a treatment area.

After reviewing these 10, Ben needed to know what the top 4 would be to do the actual preliminary design work for. It was agreed that since the Rte 119 project would be hard to actually get funded, since DOT has to do it, it makes more sense for us to put energy into #7 the Kimball Rd. Beach access area. Both have about the same cost and P reduction rates. This would put 2 areas on Kimball Rd and 2 on FPU property in the top 4.

Ordinance review - overlay district
Phil has it on the agenda for discussion at a Planning Board meeting. Need to see how much land could be developed, how much of an issue this would be.

Draft management plan
- Ben will send a draft of the by the 3rd or 4th week of October. Final document due in January.
- Everyone should plan on reading the draft and sending back comments within 2 weeks.

Public meeting **Wed. Nov. 12, 5 pm Spagnuolo Hall, Campus Center, Franklin Pierce University.** All Steering Committee and Advisory Council members should please try to attend!!!
- Will try to get as many planning board, Con com, staff members, selectmen to come to the Nov. 21 meeting. Will have some subset of the group go to a PB, CC meeting to discuss implementation grant stuff.
- Catherine will draft a flyer and email, everyone should send it around. Anne will help with mailing to stakeholders.

Catherine is working on the educational brochure, and should have a draft available for everyone to look at soon. It would be nice to hand some out at the public meeting.

**Next Steering Committee meeting:** **Fri. Nov. 21, 2-4 pm, 115 Petrocelli Hall**