Objective 1: Eliminate or reduce existing sources of polluted runoff, and prevent future problems from occurring throughout the watershed.

(Submitted by Madelyn Hennessey)

Action 1: Remediate selected erosion problems in lower watershed with volunteers and Public Works Departments (a rapid ground-truthing of old survey of the lower River may be needed before any implementation work can begin). (*Q: Where is funding?*)

Action 2: Investigate opportunities to implement the Bayscaping/ Yardscaping program in the NM River. Conduct a needs assessment to identify targeted audience and potential impacts.

Action 3: Market results of the work that has been completed or being done currently. Show success.

Objective 2: Improve productivity of shellfish harvests by eliminating pollution sources, including overboard discharges, pursuing reclassification of shellfish harvesting areas, and promoting improved management practices.

(Submitted by Ruth Indrick)

OBDs

• These have been dealt with by now, so are less of an issue going forward. They are less of a priority now than in the past.

Shoreline Surveys and Septic Systems

- People proposed having education programs or developing outreach materials about pollution sources, identifying pollution sources, and septic systems (how to maintain septic systems) - for residents, fishermen, CEOs, and LPOs.
 - o Possibly like Harpswell's and Phippsburg's booklet
 - o Any information handout should be short, concise, and easy to understand.
 - Booklets/handouts could be given to realtors to hand out to new owners along with being shared with existing owners.
 - These can help people to know who they can call in their community when they have questions.
- Another option that was brought up was the opportunity for having trainings for local citizens to carry out shoreline surveys - so areas are surveyed more frequently and local citizens know how to survey

Legislatively required disclosures to homeowners

People liked the idea of these because they make the information easy to access. They liked
having both a septic system (with how to maintain) and a coastal system (with tides and coastal
fishing community information - like what was discussed during the earlier lecture portion of the

program). The sense around the table was generally, "Sounds good. What's one more disclosure?"

Research collaborations with local universities and colleges

• If we identify projects we are interested in, we could reach out to universities for research focused on many different types of topics - legal, social science, and science. Student research projects can expand beyond a science focus.

The issue with not owning the view

Communication and outreach seem the best way to deal with this. People suggested that it
might be worth developing a committee to determine the best way to address this
communication and outreach.

Shells on the flats/shell coming out of the lakes

- Brian Beal's study in Freeport identified that shell hash quantity didn't seem to impact the population/survival of clams under a net, so this doesn't seem to be a huge priority.
- One issue that the lakes are dealing with is what to do with all the shells that are coming out of the lakes. Is there a way to have a local shell recycling program that puts shell back in the lakes?
 What is the best option for disposal of the quahog shell?

Other possibilities that could benefit the New Meadows area

- Quahog larval survey in New Meadows Lake.
- Drone images of the whole area.
- Aquaculture buoys Are the ones that will be there enough? Is it worth considering adding another buoy to gather more New Meadows information?
- Coastal access What access is available and what do community members/fishermen identify as needs?
- Data Can there be one easy place for people to access data for the New Meadows area?

Objective 3: Conduct research and monitoring to better understand the ecological and economical dynamics of the New Meadows River Watershed ecosystem.

(Submitted by Mike Doan)

Action 1: The 2008 continuous water temperature project did not take place, but there was interest in reviewing a 2002 project that involved continuous monitoring of temperature, salinity, dissolved oxygen and pH at four sites along a transect between the lower lake and Thomas Point Beach. A new study, using HOBO Temp loggers to measure water temperature in four segments of the lakes was discussed.

Action 2: FOCB has five active volunteer monitoring sites along the New Meadows. Sites include the upper lake, the marina just below the lower lake, Winter Point, Indian Rest, and the Basin. Each site is

monitored twice a day, at 7:00 a.m. and 3:00 p.m., over 10 Saturday's between April and October, for a total of 20 monitoring events. Sampling parameters include temperature, salinity, dissolved oxygen, pH, and secchi depth, all measured at the surface.

Action 3: A current water quality index is available for the five Friends of Casco Bay volunteer monitoring sites. The index includes dissolved oxygen, secchi depth, and pH.

Action 4: A study to characterize economic resources and uses of the New Meadows has not been conducted.

Action 5: The LOBO buoys deployed through SEANET in 2017 might be able to offer some insight into currents in the New Meadows and the influence of the Kennebec River on the system. However, a formal study or a mathematical model has not been planned.

Other topics that were discussed at the Forum included:

- 1. A compilation of DMR bacterial monitoring in the New Meadows.
- 2. An analysis of existing Friends of Casco Bay data collected in the New Meadows.
- 3. Potential aquaculture leases in the New Meadows "Lakes" region.

Objective 4: Protect, restore and improve habitat function and values, and minimalize new impacts. Work with partners to prioritize future protection and restoration efforts. (Submitted by Margaret Gerber)

<u>Action 1 – Protect Fish Habitat.</u> Update: Maine Stream Habitat Viewer layer updates are ongoing (Amanda).

>Action Item: Look at Maine Stream Habitat Viewer to prioritize target species and add descriptions, overlaying Viewer with Beginning with Habitat data.

>Action Item: More education, advocacy, and informing the public about how the request for information process works to help MDIFW prioritize displaying this information to inform folks on the local levels.

Action 2 – Collaborate with existing habitat protection and restoration efforts.

>Action Item: Educate, promote, and connect available information and funding resources to land trusts to aid with planning for focus areas and future acquisitions.

<u>Action 3 – Review relevant existing habitat restoration and protection materials, etc.</u> Update: Information is already available and used by the towns and local land trusts of Harpswell and Brunswick, etc.

>Action Item: Assess what has already been done and report out.

Action 4 – Inventory priority organisms and significant habitat, including rare and endangered species. Update: New wildlife action plan in process that has marine species included (new feature). State has to vet species put on the map currently. Bowdoin Coastal Studies program currently developing database with interactive, enhanced species list that includes distribution, life history, link to articles and GIS data of selected attributes using other existing knowledge that MDIFW could work off of and/or with.

>Action Item: Provide knowledge to local groups on how to get on map to make their own information more available and establish local information resource sharing for more granular data scale (to complement MDIFW's co-occurrence model to concentrate natural resource information).

>Action Item: Engage local groups to get feedback on how this information is and will be used.

<u>Action 5 – Update protected lands maps.</u> Update: Five people in state are allowed to make changes to protected lands maps, so there is no benefit to having it happen all at once, as one person in the MDIFW office focuses on this, even though MEGIS publishes it once a year. The connection is not clear as to where folks would access up to date information (MDIFW vs MEGIS), if this was agreed upon by land trusts, or how that agreement would take place. Brunswick-Topsham Land Trust currently updates their conserved lands annually through MEGIS.

>Action Item: Have a discussion or survey land trusts and towns as to how often they update their conserved lands on MEGIS and work towards establishing a timeline for land trusts, towns, etc to update information so it will be more reliable and up to date – more than once a year?

<u>Action 6 – Develop an inventory of restoration opportunities for the New Meadows watershed.</u> Update: Maine Natural Areas Program already published coastal resiliency maps.

>Action item: Ran out of time to discuss.

Objective 5: Explore Tidal Restriction Restoration (at State Road causeway). (Submitted by Lee Cataldo)

Tidal restrictions on the New Meadows are of interest because of the impact restricted tidal flow has on water quality and the upper wetlands, as well as the impact reduction/removal of restrictions would have on the shellfish resources and local harvesters who are dependent on these.

The New Meadows is listed as impaired – Nitrogen, DO, bacteria. As such, the state is required to take action to improve water quality. The question is - if some of the tidal flow (eg 40%) were restored, could the lakes be maintained the for shellfish harvest, while also improving water quality throughout the system.

Various studies were done looking at increasing tidal flow through various options and to various degrees. These studies considered how much more or less mudflat would be exposed based on the

various scenarios. With these would come different potential benefits (and risks) to the ecosystem, as well as various levels of impact on the local fishery.

Action Items:

- * Action Item 1: There needs to be more data on the water levels throughout the system, as well as current conditions in the wetland above the Old Bath Rd Bridge
- * Action Item 2 (not resolved): Ultimately it will be the towns that need to make recommendations on any changes in tidal restriction. It is likely valuable to them to have a group of stakeholders, like this, make available a full set of information about the whole system of environmental and social issues wrapped up in a change in tidal restriction. Should a subcommittee be created for this topic, and if so, what would be its purpose and who would be involved? Any subcommittee needs a representative from Towns of West Bath and Brunswick.

Data:

- * ** Based on Phase 2 Final Alternative 1: 24' wide 2x opening set, 4.5 feet deeper at existing location: Based on what the harvesters at the table shared, the area that would remain subtidal in the central channel of the lower lake, is almost all ledge and not good for harvesting quahogs (i.e. not habitat for this sp.). Those who harvest the lower lake now do not have to have a Brunswick town license because they are not in the intertidal zone. Based on this scenario those folks are "out of a job" (says the harvester) because the only remaining harvestable area would be in the intertidal zone (and for soft shell clams, if they recolonize the area).
- * **Currently the green crab is not an issue because of the impoundment. This sp. would really like the warm habitat of these lakes, given the opportunity to enter.
- * There is a brand new bridge at the upper tidal reach9 Old Bath Road), so increasing tidal flow at that point is not likely for 80+ years (depending on expected life of the bridge).

Questions:

- * What would be the impact on quahogs if there were increased tidal flow? Many times this has been asked, but no one has given a satisfactory answer. This is important because this hard(er) shelled spp. is could be an important player in long-term ecosystem health in the face of ocean acidification, and the persistent presence of green crab, as well as being an important social and economic factor in the local fishery.
- * Likewise, no one has answered how long ago the marsh at the head of the river was productive, if it is possible to restore (or at what cost), and to what end/why?

Objective 6: Broaden Municipal Engagement and Community Outreach (Submitted by Susan Olcott)

** = Two priority actions

**Action 1: Encourage greater involvement of municipal officials

- NMWP should be really clear on why their engaging municipal officials what is the objective?
- NMWP can be a bridge between the local communities and scientific community and its resources (e.g. SEANET)
- Aquaculture is a great lens through which to address other issues, i.e. water quality

Action 2: Update NMWP website and create a website maintenance plan

• CBEP is currently an administrator; whether CBEP continues depends on governance of group.

Action 3: Using social marketing techniques, conduct targeted outreach aimed at changing behaviors.

- Does anyone do water quality monitoring? (Yes, FOCB, but most people don't know about it.)
- CBEP Nutrient Council looking at issues; Casco Bay Monitoring Group; SEANET 1-year resources.

Action 4: Hold annual public meeting to encourage communication with and involvement from watershed residents. (No discussion)

Action 5: Create a press distribution list and press strategy (including news releases). (No discussion)

Action 6: Develop a logo (Done)

**Action 7: Basic school outreach

- Get schools to collect data; non-traditional partnerships with landowners, harvesters, municipal officials.
- Getting kids involved helps educate parents, communities (e.g. kids can present on results at municipal meetings).

Action 8: Develop a limited number of "You are entering the NMR watershed" signs. (No discussion)