



# SPRUCE CREEK ASSOCIATION

## TIDAL RESTRICTION MEETING:

### Summary of Feedback

October 15, 2004, Kittery Town Hall

Below are after-meeting comments, questions, suggestions and feedback from the approximately 35 attendees of the meeting to explore the issues of the Route 1 Tidal Restriction held in October of 2004. We have grouped these into thoughts expressed about the different options (though each of these options is not necessarily mutually exclusive), and general concerns or thoughts.

## OPTIONS

### Option A: Remove the Dam

- *Opinions expressed by those in favor of removal.*
  - Seems like it would be relatively easy to accomplish.
  - Removal order has been issued once already.
    - Previous (Shevenell-Gallen) study was thorough and there was a site order issued and agreement signed among all the relevant parties to remove the flashboards and coffer dam. Should have been done at that time. (*NOTE: the order was for the boards to be maintained for a flushing regime.*)
  - Dam should be removed for these reasons: It is not good for water quality, likely not good for fish, restricts the flow of food and thereby affects other wildlife.
    - In general, the more water flow (and flushing), the better the water quality and health of the marsh system.
    - Increased duration of tidal flooding in the upper parts of the marsh may add to the salt marsh's resistance to invasive species (such as phragmites).
    - May be some benefit to clams and other animals that live in the mud, but likely the biggest benefactor may be the birds as they come in to feed on the mudflats.
    - As for water, currently there is tidal exchange and clear high tide and that won't change if the dam is removed. The low water level however will change.
    - Although the vegetation present appears to be healthy, specific plant species (and habitat), which should be there, have very likely disappeared.
  - Development pressures.
    - Poor land, no sewer systems means likely increase in pollution. Best to have more flow (flushing) in this part of the creek to maintain water quality and prevent buildup of nutrients and resulting algae blooms.
    - Can we be pro-active and call this a *preservation project* (preventative vs. restorative) and take action like removing the dam before the water quality and marsh declines)?
  - Consider incremental removal of dam structure.
    - To allow site to come to a balance slowly and examine what the water does over time—one flashboard per year).
    - Remove sheet metal at end of process to avoid compromising flow, causing erosions issues, and allows for safer passage of fin fish up or down.
    - Will help determine the lowest water level needed to enable tidal exchange for recreational purposes, access for fish, mudflat exposure, wading bird habitat?
    - Perhaps install a new device that regulates flow and fills the basin on as-needed basis and create an association to manage the flow, like Spinney Creek.



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- Take the boards out and see what happens without doing more studies (which can also be construed as stall tactics).
- *Concerns about removal of dam*
  - Structural Integrity of Dam
    - Engineering assessment of dam needed: is it salvageable and what would the costs be?
      - Possibility of dam failure? Is it sound and if not, should it be repaired? Should it be removed?
      - What if partially removed and rest crumbles?
      - Liability issue: Town of Kittery signed a document (Eric Stahl, then Town Manager) that assumed liability on the part of the town for any damages that could be incurred should the current dam fail.
  - Environmental health of upper Creek.
    - Scientific assessment of damage to upper reaches of Creek.
      - Limited Effect of Restoration because of other blockages? Will restoration work if there are restrictions further upstream?
      - Even opening up the lower portion of the marsh is good. Salt marshes lost incrementally. Partial restoration is still restoration.
      - Two upstream crossings appear undersized.
  - Danger of flushing out the contaminants “stored” in there now
    - What happens to the water quality BELOW the restriction if this area is allowed to flush?
    - The risks of are not great, effects will probably be short-term only. It would probably be flushed in a couple of tides.
  - Would removal change the environment to different but not necessarily better?
  - Scenic impact of removal.
    - Increase in presence of mud flat over water?
    - Salt vegetation over fresh?
    - Will it increase the tide or make it retreat further for longer?

## Option B: Leave the Dam

- *Opinions expressed by those opposed to removal.*
  - The upper Creek has unique characteristics and requirements that should not be changed..
    - Years ago—before the dam—there was more mud flat than water and more odor. In recent years the water has been more constant although shallow.
    - Property value would decrease if flashboards removed.
  - Habitat does not appear to be degraded.
    - Looks like upstream habitat is healthy –lots of salt marsh, few invasives, indicating plenty of salt water is reaching area.
  - The impoundment area may act as a sink for contaminants coming from I-95. This portion may act as a filter to the lower Creek and keep that environment cleaner.
    - Some towns have built a retention pond such as our impoundment purposely as pollution control from roadway systems.
  - Commercial impact.
    - Kittery Trading Post – if there is a full removal because they have a significant interest.
    - Aesthetic impact (sight, odor) on Outlet mall shoppers.
  - State’s motivation for removing the flashboards may be to clean up this area and allow for commercial fishing (some years back there was discussion of doing that).



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- Consider upgrading and improving existing structure—not removing it.

## Option C: Conduct an Engineering and/or Environmental Study

- *Opinions—There is support for a study of environmental conditions, water quality and structural considerations—but some recommended it be done within limits.*
  - There can be many unintended consequences of an action such as taking out the restriction.
  - Disinterested party should assess the positive and negatives to taking the restriction out.
  - Do a study first to back up recommended actions and help support that no harm could come of it.
    - Report would focus on plans and effects of options.
    - What are the potential costs environmentally and dollar-wise of leaving it vs. altering or removing it?
    - Assessment of current conditions: “Hard science” versus just a “visual report” of condition of Creek and potential effects of tidal restriction.
    - Study tidal reach and volume and whether removal will affect the highest tides or just a low-tide restriction to better understand habitat and fish needs.
    - Any investigation should center on water quality and in particular contaminants that may be present in sediment in the impoundment and upper Creek.
    - Collect water samples on a monthly or bi-monthly basis to determine if water quality is compromised above dam.
      - Pre-measure water quality above the dam.
  - People will always want “one more study”.
    - Especially if in opposition (stall tactic, etc.) We will never know “everything” – at some point need to take what you know and make a decision.
    - Need some data, but also need at some point to make a judgment call and get something going on the ground.
  - Previous assessments:
    - KCC hired environmental engineer who determined that there had been no maintenance since 1988 and had concerns about the strength of the existing structure.
    - Others have looked at boards and determined that if taken out they would likely not go back in. And in order to get them out, the dam itself would likely be seriously damaged.

## GENERAL THOUGHTS

### Concerns

- Who would be the final decision maker on this?
  - Several respondents were not sure it should be the *Town Council*.
  - Doubtful that a *state agency* will order that the Creek should go back to its natural flow. They’ll support individual Town’s decisions and manage their domain.
- Restoration of tidal flow (i.e. health of Creek, Gulf) vs. protection of *private* interests. How do you balance this?
- What is the purpose for putting in or taking out the whole structure vs. partially dismantling?
- The scientific case, vis-à-vis restoration, particularly the *benefits* of removal, are not only not dramatic they are not going to be black and white.

### Neutral / No position

- *Opinions expressed by those who take no position*



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- Neutral on whether it should come out or stay because of lack of info.
- Will support us whatever decision and action is ultimately reached.

## **Consider Bigger Picture**

- *Opinions*
  - In favor of doing what is good for the Creek and the citizens at large, but only convinced with good scientific evidence.
  - No one took responsibility for managing the dam; now need to get people with a vested interest (not public works) to manage it.
  - This is a public trust resource – need to balance everyone’s needs and look at all alternatives.
  - Restoration is only one aspect of a watershed protection and this is only one culvert. There are a host of similar issues (stormwater runoff, OBD, other pollution, etc.).