Habitat - Backfill Specs

Need to balance habitat suitability with engineering design and source availability

- Stability vs. habitat suitability (growth medium)
- Look to use less coarse materials
- Sourcing: availability, reliability
- Crushed quarried rock vs. natural riverine material (angularity, mineral composition)





Habitat - Bank Treatment

Efforts to limit hardening of shoreline. Balancing engineering (structural stability) and habitat concerns

- GE original design included 6 inch armor stone in all locations where shoreline was impacted
- Working towards a series of treatments depending upon bank type, current velocity, level of stability
- If existing bank has rip rap, it will be replaced with rip rap
- Integrate shoreline dispute decision with bank treatment and 15% backfill allocation





Habitat - Use of 15% backfill

Generally speaking 1 ft of backfill over all dredge areas, an additional 15% of that volume to be utilized for SAV replacement/reconstruction

- EPA provided GE with guiding principles for use of 15%
- GE preparing plans that incorporate 15% with other plan modifications to address decision on near-shore areas
- Focus on upstream dredge areas, restoration to photic zone (6 - 8 ft)
- Considerations (e.g., emphasis on large, high quality beds that can serve as a seed source)
- EPA/GE to go through interactive process for allocation





Habitat - Success Criteria

How to define success or failure of habitat replacement/reconstruction

- GE initial approach provided in FDR Adaptive Management Plan
- Subsequent discussions resulted in exploration of alternative approaches
- EPA and GE statisticians and biologists developing an alternative approach
- Narratives success criteria to be developed
- EPA comment to include interim triggers for corrective action; GE is developing interim triggers for consideration





Habitat - Miscellaneous

- Restrictions on anchoring and vessel traffic in non-dredged areas
- Planting specs (e.g., live stake spacing, how/where to plant, native species)
- Suitability of capping materials for habitat
- Aquatic vegetation bed model revised



