Mackworth Island Flip Chart Summaries

Group Number	Comments/Questions	Strategies and Solutions
Group 1	Justification for purpose: • Overall bank assessment – poor. Justification for purpose: • Costs to relocate path • Low costs • Movement of sediment and toe • Understanding of hydrology and infiltration	• Move path back. • Infiltration? Water seeping out. • Cut off drain • Movement of water above: control seepage, vegetative buffer at upland, bank upslope improvement, coir logs with plantings, oyster bags and aquaculture, willow, speckled alder, low growing sumac. • American beach grass: substrate improvement.
Group 2	Questions: • What are the future conditions? Due to SLR and climate change. • What exactly are the shoreland zone regulations?	• Add a large aggregate rock, but allow seepage and water flow without taking sediment with it. • Floating attenuator (logs), stakes with rope ties • Filter fabric, coir blankets • Ice, ice, ice • Logs braced by trees to slow water • Bedrock location, is it shallow to bedrock? Insufficient to establish plants. • Correct profile at HAT • Friable soils, surface runoff • Rhizomes • Bedrock anchors • Increase complexity of entering wave: wave attenuation builds up energy • Establish temporary stage • Cutting trees = more sun. • Ground water on slope
Group 3	NA	• Boulders to attenuate waves • Cut vulnerable trees but leave root balls to avoid future soil loss. • Lay tree across the sites • Groundwater discharge at toe of slope • Top of bank – encourage more of buffer and logs to catch material, organic component to interrupt slope side • Terracing like Pocket Beach • Need to get into intertidal zone or it will become subtidal.
Group 4	Constraints and opportunities: • Use of path • Water runoff • No vegetative buffers • Fetch • Seepage • Positioning of ledge • Poor soil stability • Type of vegetation (understudy) • Expose toe of slope	• First define what is the mechanism for engineering specific structures. • Plant material. • Water diversion using vegetative buffers. • Changing type of foot path. • Slope: plant natives that are native to the upper part of slope, also get plants that are salt water tolerant to ocean spray. • Use big rocks, “natural” distribution boulders that are big enough to keep toe down. • Combination of big rocks, coir logs, logs, root wads. • Salt marsh plugs maybe, if the environment is marsh.