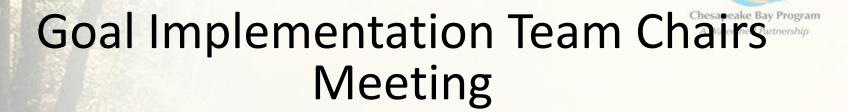


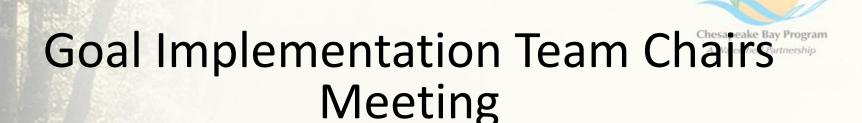


CBP Decision Framework in Action

Jeff Horan, Habitat GIT Chair February 16, 2012



- •Meeting Purpose: To agree on the most effective way for the GIT's to operate and provide leadership within the Bay Program Partnership
- •The GIT chairs agree with the Executive Council (EC) and the Federal Leadership Committee (FLC) that the GITs should play a major role in strengthening the partnership by providing a forum for coordination, collaboration and for leveraging resources form all partners



- •Bringing Issues to the MB, PSC and FOD:
- •Use the seven steps in the Decision Framework to manage adaptively.
- •GITs need to test and refine goals, milestones, strategies, processes and metrics.
- •GIT's need a clear process to bring key issues to the attention of the MB, PSC, FOD, FLC and EC.



Habitat Goal Implementation Team

- •Restore a **network** of land and water habitats to **support priority species** and to afford other public benefits.
- Oversee workgroups covering four main focus areas:
 - Wetlands
 - Fish Passage
 - Stream Health
 - Submerged Aquatic Vegetation (SAV)



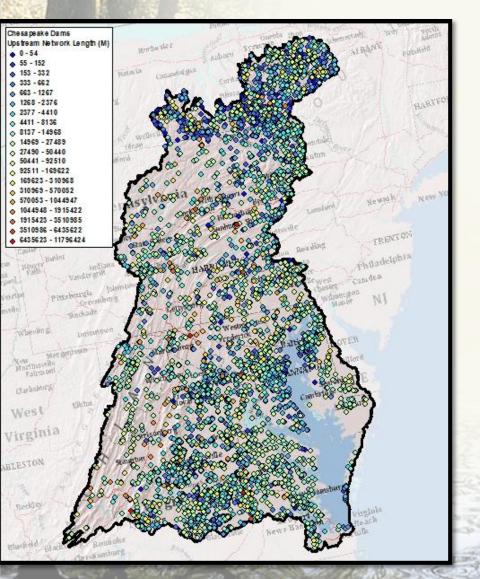
Wetlands



- Goal: Restore 30,000 and enhance 150,000 acres of tidal and non-tidal wetlands by 2025
- Key factors: slope and residence time, vegetation, private ownership
- Strategies: Target areas that benefit living resources (e.g. black ducks) and water quality
- Performance assessment: Two year milestones (4,000 acres restored and 20,000 acres enhanced every two years)

Fish Passage





- Goal: Open 1,000 additional stream miles for fish passage by 2025
- Key factors: Downstream barriers, target species, hydrodynamic conditions
- Strategies: Target priority projects using a collaborative federal and state prioritization process
- Performance assessment: Two year milestones (132 miles of stream opened every two years)

Stream Health



- Goal: Coordinate expert input on restoration techniques, funding options, and priority targets for natural channel design
- Key Factors: Geomorphology, biodiversity, temperature
- Strategies: Implement Stream
 Functional Framework that
 identifies critical stream functions
 to be assessed for stream
 restoration
- Performance assessment: Followup monitoring





Stream Functions Pyramid

A Guide for Assessing & Restoring Stream Functions » OVERVIEW

SITE SELECTION

5 BIOLOGY » Biodiversity and the life histories of aquatic and riparian life

PHYSIOCHEMICAL » Temperature and oxygen regulation; processing of organic matter and nutrients

REACH SCALE IMPROVEMENTS

GEOMORPHOLOGY » Transport of wood and sediment to create diverse bed forms and dynamic equilibrium

PYDRAULIC » Transport of water in the channel, on the floodplain, and through sediments

HYDROLOGY » Transport of water from the watershed to the channel

INDEPENDENT VARIABLES



Brook Trout

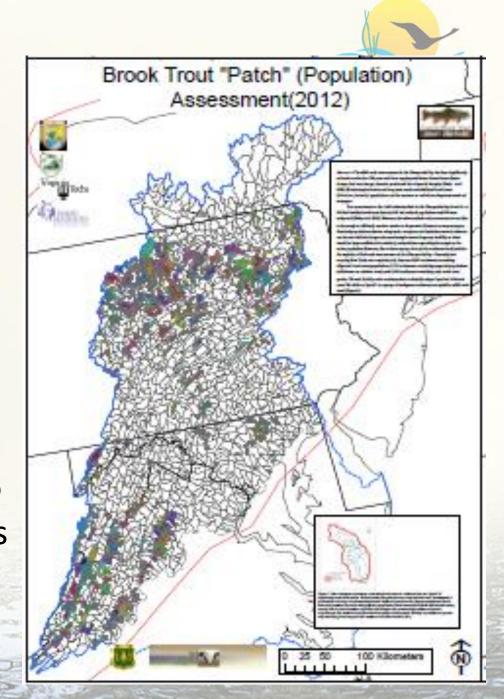


- Goal: Restore brook trout populations by improving 58 sub-watersheds from 'reduced' to 'healthy'
- Key Factors: Temperature, non-native species, stream fragmentation
- Strategies: Work with EBTJV to identify priority restoration areas
- Performance assessment: Two year milestone (improve 10 sub-watersheds every two years)



*GIT and EBTJV working to revise goal and milestone to reflect latest catchment-level data

- Proposed metric based upon brook trout occupancy of contiguous catchments (patches)
- Catchment level goals and data will provide more meaningful information to natural resource managers



SAV



- Goal: Reach 185,000 acres, linked to a restored Bay
- Key factors: water clarity, temperature, disruption of existing beds
- Strategies: improve water quality through BMPs watershed wide
- Performance assessment: annual aerial surveys (progress toward goal) and water quality monitoring (to explain observed patterns with SAV)



SAV



- Goal: Plant or seed 20 acres of SAV each year.
- Successful plantings persist over time and have attributes of natural SAV beds (sustainability, plant density, improvement to water quality, reproduction and dispersal of propagules, wave attenuation)
- Key factors: Water clarity, temperature, physical environment, technical understanding of restoration success (habitat suitability, recruitment)
- Strategies: Small scale plantings aimed at increasing understanding of site selection, recruitment, and habitat suitability
- Performance assessment: Follow-up monitoring (both field and remote sensing) to assess success of plantings.

Goals

Factors Influencing Goals
Current Efforts and Gaps
Strategies and Resources
Monitoring
Performance Assessment
Case Studies
Make Your Own Map

Historic Bay Grass Distribution used to set Bay-wide Abundance Goal of 185,000 acres: The segment specific SAV restoration goals were derived from the full record of mapped SAV data (from historical through year 2002 data) for the year in which a segment had the greatest amount of SAV acreage, referred to as the single best year. The SAV data were then clipped by the shoreline used to define the segments (any data not within a segment boundary was deleted)

Goals

The Chesapeake Bay Program Submerged Aquatic Vegetation (SAV) Workgroup has reviewed the historic record and photographic evidence from 1930s to the present and determined that the Bay has historically supported approximately 185,000 acres of bay grasses, also referred to as SAV. In most cases, as water clarity improves, SAV will reestablish without the need for planting. However, there are places where the water clarity is sufficient, but there is no longer a seed source for SAV to naturally regenerate. Therefore, the workgroup endeavors to plant or seed 20 acres of SAV each year in order to provide seed sources and improve physical conditions for further SAV recruitment. This restoration target is intended to stimulate the natural bed growth required to eventually achieve the bay-wide abundance goal of 185,000 acres. Please refer to the maps below for the historic distribution used to set the bay-wide abundance goal and current status of bay grass abundance, both bay-wide and by segment.

View:

Historic Bay Grass Distribution used to set Bay-wide Abundance Goal of 185,000 acres
 Segment SAV Acreage Goal Bay Grass Distribution 2010

