# MANAGEMENT STRATEGY STREAM HEALTH

# GOAL: Vital Habitats

### OUTCOME

Continually improve stream health and function throughout the watershed. Improve health and function of ten percent of stream miles above the 2008 baseline for the Chesapeake Bay watershed.

### CURRENT EFFORTS

- Development of 2008 baseline for the Chessie
   BIBI (indicator of Biotic Integrity)
- Guidance to evaluate stream restoration projects
- STAC workshop on Designing Sustainable
   Stream Restoration Projects within the
   Chesapeake Bay Watershed
- Pooled monitoring approach to stream restoration projects
- Ongoing monitoring efforts— National Rivers and Stream Assessment; state 305b reports, tidal and non-tidal network monitoring, etc.
- Chesapeake Bay Regional General Permit for TMDL (US army Corp of Engineers)
- MS4 permits that have incorporated Bay TMDL nutrient and sediment load reduction goals
- WIP implementation of BMPs
- Development of Chesapeake Bay BMP verification

## GAPS

- Information & Data: Benthic macro invertebrate data from enough streams with enough frequency to track progress over time, Bay-wide and stream metrics other than biological indices to assess physical and chemical health and function, update or review of methods to define reference conditions or endpoints for streams, sufficiency of data to demonstrate effectiveness of stream restoration practices, sufficiency of data to demonstrate restoration of stream processes following installation of upland watershed BMPs.
- Regulatory & Programmatic: Uniform design process for stream restoration that can measure change in stream functions and/project success based on a project goals and objectives, Information needs to support innovative, effective design approaches to identify restoration potential and success for different land uses, stream types, and current and future site constraints, causes of impairment/stressors, Identification of local and watershed priority stressors that affect local steam health and management actions to results in function lift, Coordinating/collaborating with other Goal implementation teams focused on stream condition.
- <u>Prioritization</u>: Targeting procedures for cost-effective restoration actions and design approaches that will achieve both water quality and biological functional improvement, investments in research to improve the body of knowledge surrounding restoration techniques and net benefit to stream and watershed health.

### MANAGEMENT APPROACHES

- Identify an appropriate suite of metrics to measure the multiple facets of stream health
- Provision of adequate funding and technical resources to support functional lift in stream restoration projects, in addition to nutrient and sediment reduction.
- Active and engaged participation by local communities with Federal and State partners
- Develop and promote holistic stream restoration design guidelines that identify the level of degradation and improvement of stream functions and key stressors/factors limiting potential uplift.
- Work with Chesapeake Bay Partners to enhance the capacity of local governments, organizations and landowners of beneficial stream restoration and maintenance practices.
- Local Engagement: Engage with local gov't to inform landowners as well as the general public of beneficial stream restoration and maintenance practices and their impact on the community.
- Provide research and/or documentation that identifies the nexus between improving stream functions and health and broader societal issues such as environmental justice in support of the Diversity Outcome.



For the full management strategy, visit: www.chesapeakebay.net/managementstrategies