



Trout Unlimited's Conservation Success Index: Conservation and Monitoring Strategies for Pennsylvania's Coldwater Habitats

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Summary

Trout Unlimited's Conservation Success Index (CSI) is a compilation and assessment of information related to a species' distribution, populations, habitat features, and future threats. The CSI assembles spatial data available from national, state, and non-profit resource management agencies into a database and summarizes the data by watershed. These watershed-scale summaries are interpreted within an analytical framework and assigned a categorical score of 5 (high) to 1 (low), allowing for the investigation and comparison of conditions and threats within and across watersheds.

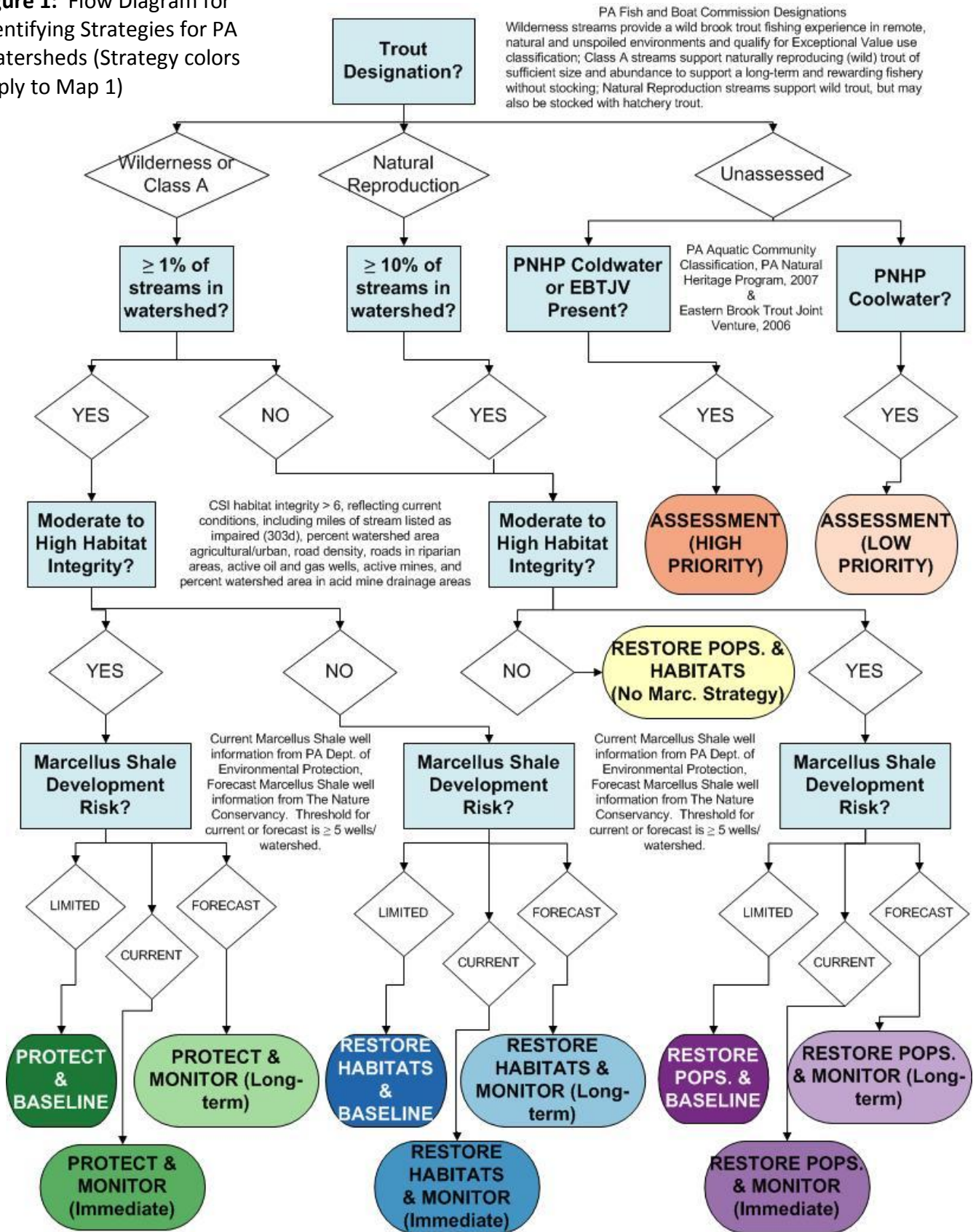
CSI analyses are typically conducted across the distribution of a species. This analysis builds upon the CSI for eastern brook trout, completed in 2007, which used data assembled by the Eastern Brook Trout Joint Venture. This analysis uses local, Pennsylvania-specific data provided by partners ranging from state agencies such as Pennsylvania Fish and Boat Commission to non-profit organizations like The Nature Conservancy to provide a higher-resolution perspective on the condition of and threats to trout and coldwater habitats in Pennsylvania.

Information within the CSI can be processed through a decision tree to identify conservation, monitoring, and assessment strategies for each of Pennsylvania's watersheds.

- **Conservation strategies** reflect opportunities for *protection, population restoration, and habitat restoration* actions to benefit Pennsylvania's trout
- **Monitoring strategies** identify opportunities for *baseline, immediate, and long-term monitoring* to track the impacts of Marcellus Shale drilling on water quality and aquatic communities
- **Assessment strategies** recognize *high and low priority* opportunities to identify additional trout populations across the state

Figure 1 provides a flow diagram for identifying strategies and Map 1 shows these results applied to Pennsylvania's watersheds. Additional information, including details on data sources and analyses, is available in the accompanying full document, **CSI_PA_Trout_Conservation and Monitoring Strategies v1 Full.doc**.

Figure 1: Flow Diagram for Identifying Strategies for PA Watersheds (Strategy colors apply to Map 1)



Map 1: Conservation and Monitoring Strategies for Pennsylvania (Strategy colors from Figure 1) and TU chapter boundaries

