

2015 Patuxent River Conference

Questions of Concern

Polling Results

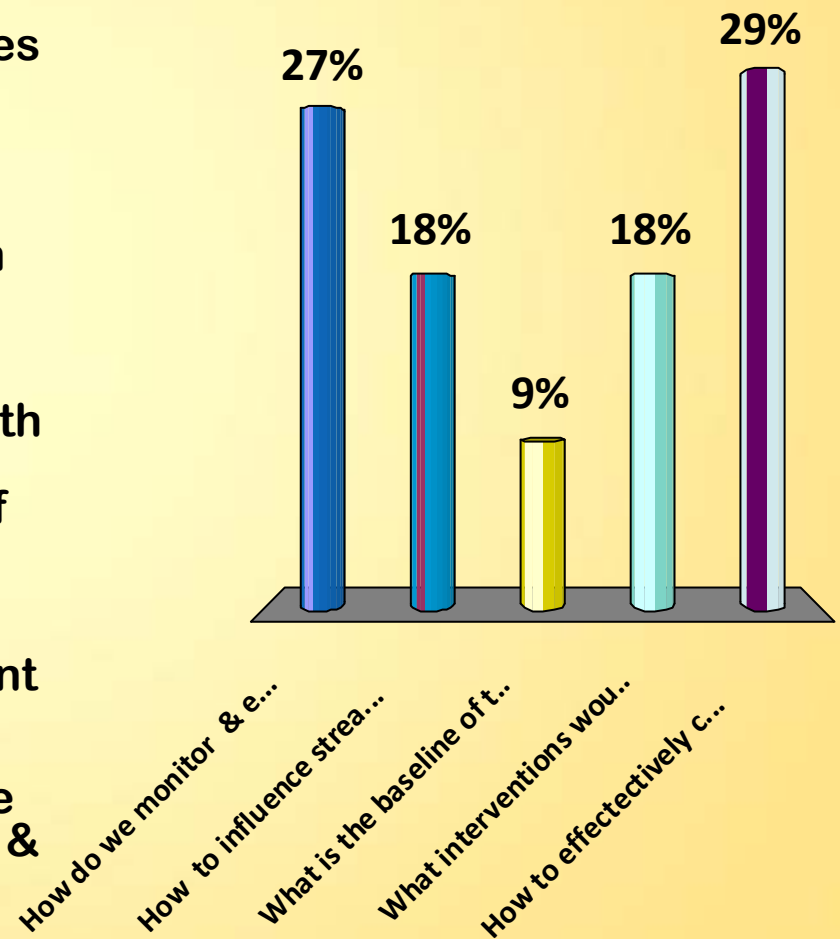
1. Watershed / Upland Species and Habitat

What is the most fundamental scientific question concerning watershed / upland habitat and species that would enhance our understanding of the Patuxent River ecosystem?

Watershed / Upland Species and Habitat

Fundamental Questions

- A. How do we monitor & evaluate restoration practices through the lens of water quality, habitat connectivity, and species conservation?
- B. How do stream water condition & ecosystem function vary between physiographic provinces & land uses in ways that are relevant to people & policymakers?
- C. What is the baseline of the current health (nutrients, sediments, chemical contaminants) of the nontidal portion of the Patuxent River?
- D. What interventions would be most effective in reducing sediment & nutrient loading?
- E. How do we effectively communicate the connection between land management & the Patuxent River watershed?



Watershed / Upland Species and Habitat

Most Fundamental Questions

- 1. How do we monitor and evaluate restoration practices through the lens of water quality, habitat connectivity, and species conservation?**
- 2. How do we effectively communicate the connection between land management and the Patuxent River watershed?**

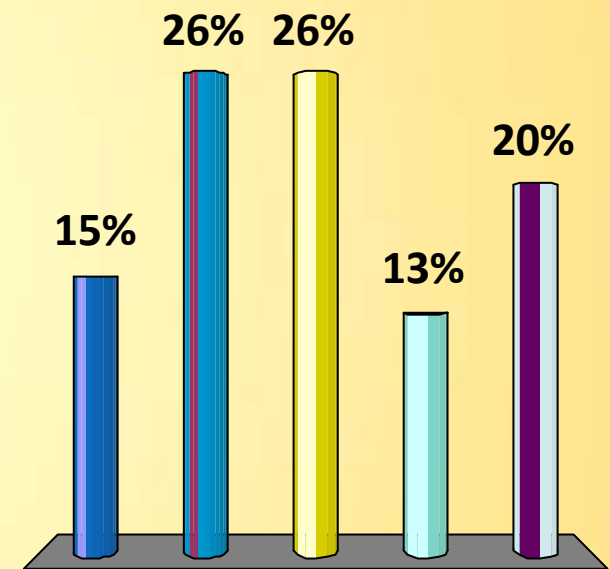
2. Tidal Species and Habitat

What is the most fundamental scientific question concerning tidal habitat and species that would enhance our understanding of the Patuxent River ecosystem?

Tidal Species and Habitat

Fundamental Questions

- A. How do we prepare for impending climate change through improved understanding of salinity changes, sea level rise, ground water, storm events, & the role of keystone areas (marshes, forest buffers, & tidal streams)?
- B. What role do tidal creeks & wetlands play in processing land-based or Patuxent tidal fluxes of nutrients & sediments?
- C. How effective are different management strategies (ie. Citizen Science, Living Shorelines, adaptive management, BMPs <Best Management Practices>) in improving water quality / habitat quality, & how do we measure that effectiveness?
- D. What is the most significant impact of climate change on tidal systems?
- E. How do we synthesize long-term monitoring & apply that data to improve water quality?



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Tidal Species and Habitat

Most Fundamental Questions

1. **What role do tidal creeks and wetlands have on processing land-based or Patuxent tidal fluxes of nutrients and sediments?**
2. **How effective are different management strategies (i.e. Citizen Science, Living Shorelines, adaptive management, BMPs <Best Management Practices>) in improving water quality / habitat quality, and how do we measure that effectiveness?**

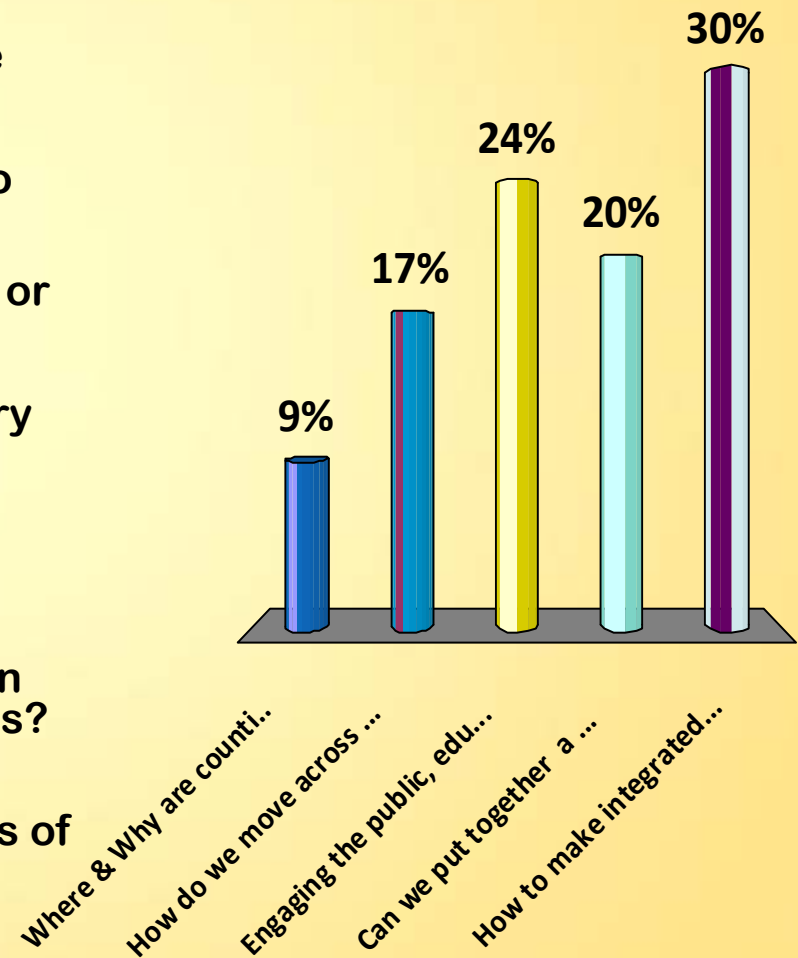
3. Conservation, Restoration, Management, and Monitoring

What is the most significant conservation, restoration, management, or monitoring strategy that would enhance water quality in the Patuxent River over the next 5 years?

Conservation, Restoration, Management, and Monitoring

Fundamental Questions

- A. Where & why are counties falling short on WIPs (Watershed Implementation Plans) / TMDLs (Total Maximum Daily Loads). Emphasize the evaluation of BMPs (Best Management Practices) for agricultural practices & engagement of the agricultural community to promote change?
- B. How do we move across policy “stovepipes” or structures to address cross-cutting goals wherein one management action may have unintended consequences which are contrary to other goals in tidal waters?
- C. How do we engage the public through education, knowledge, & attitude?
- D. Can we put together a dynamic, complete, & current database to reveal gaps in the data in order to determine additional research needs?
- E. How can we make integrated local demonstration projects to show stakeholders of the Patuxent River watershed that effective land management can improve the social & economic value of the land?



Conservation, Restoration, Management, and Monitoring

Most Fundamental Question

How can we make integrated local demonstration projects to show stakeholders of the Patuxent River watershed that effective land management can improve the social and economic value of the land?