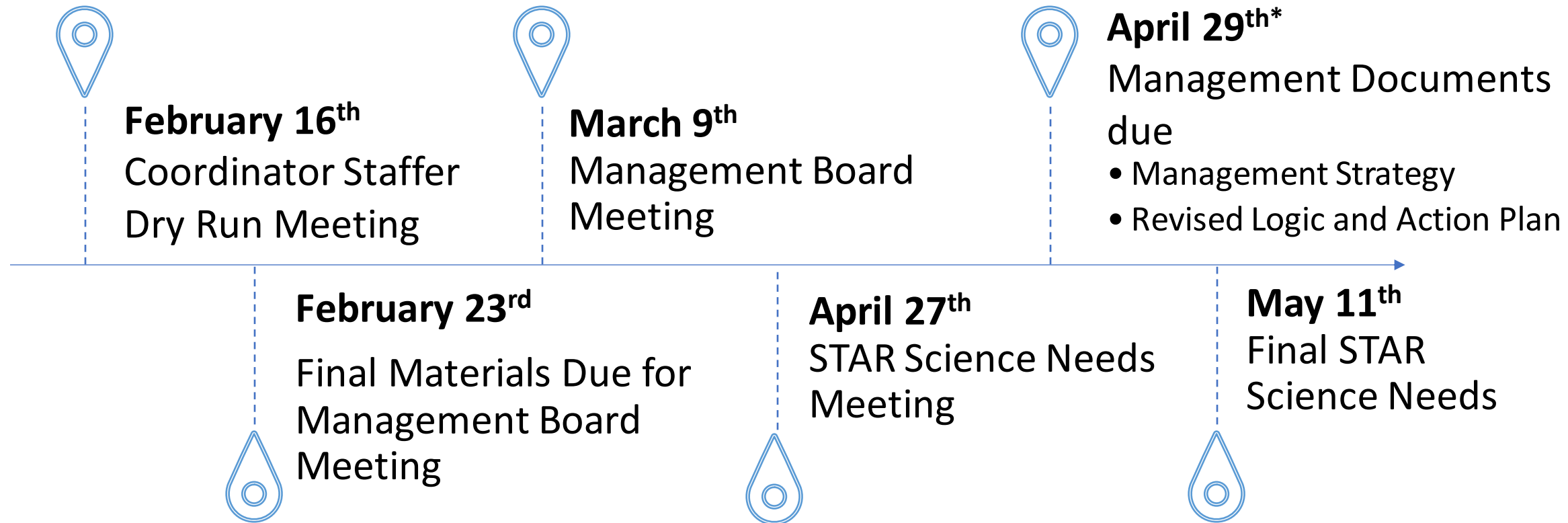


An aerial photograph of a coastal region. A river or estuary flows from the bottom right towards the center. The left side of the image shows a mix of urban development, including roads, parking lots, and some industrial or commercial buildings. The right side is dominated by dense, dark green forest. The overall tone is somewhat muted, with a dark overlay.

Land Use Outcomes Next Steps

HWGIT Meeting February 13th, 2023

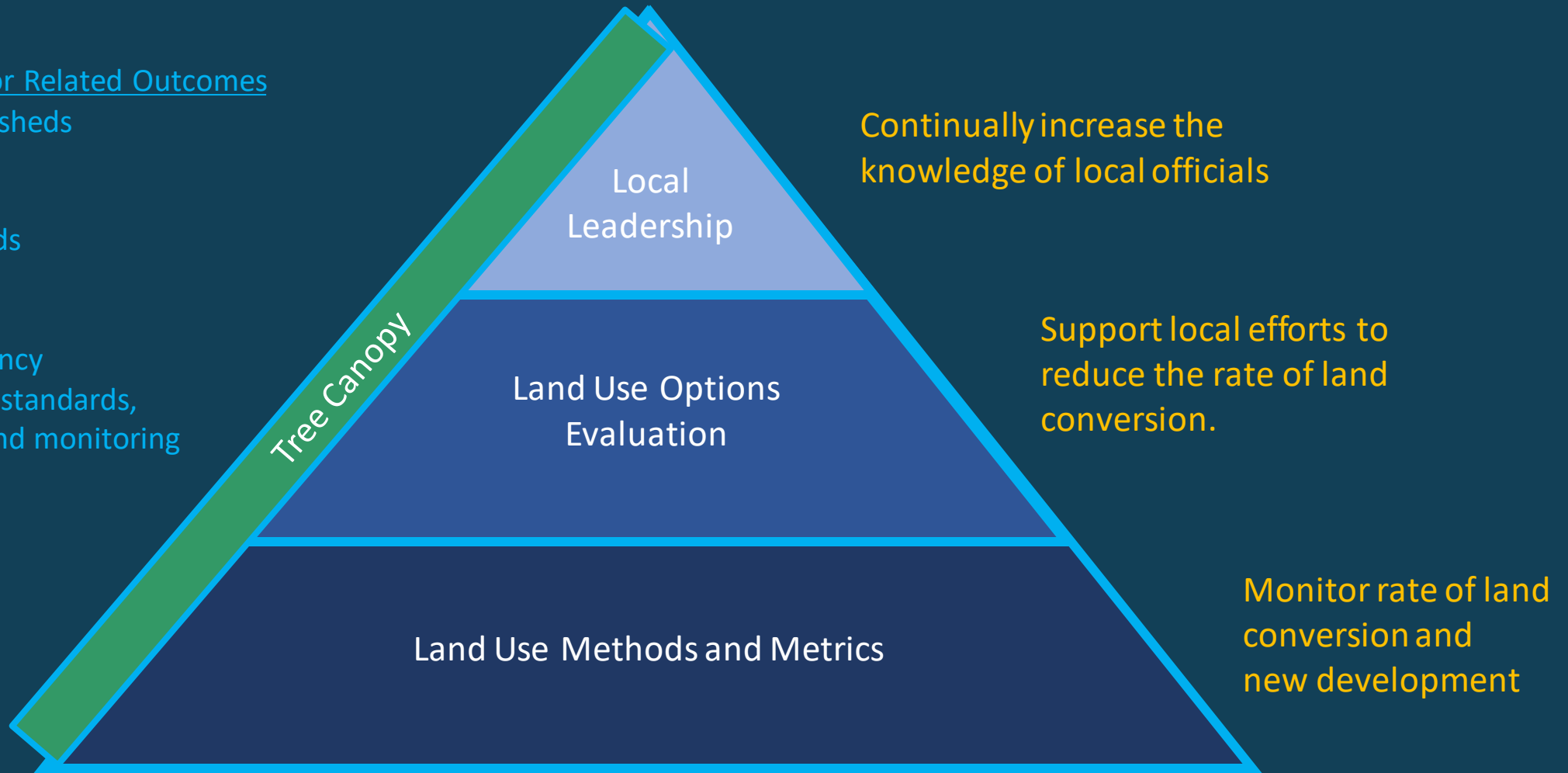
LUOE and LUMM SRS Timeline 2023



Local Action Cohort of Outcomes

Dependent and/or Related Outcomes

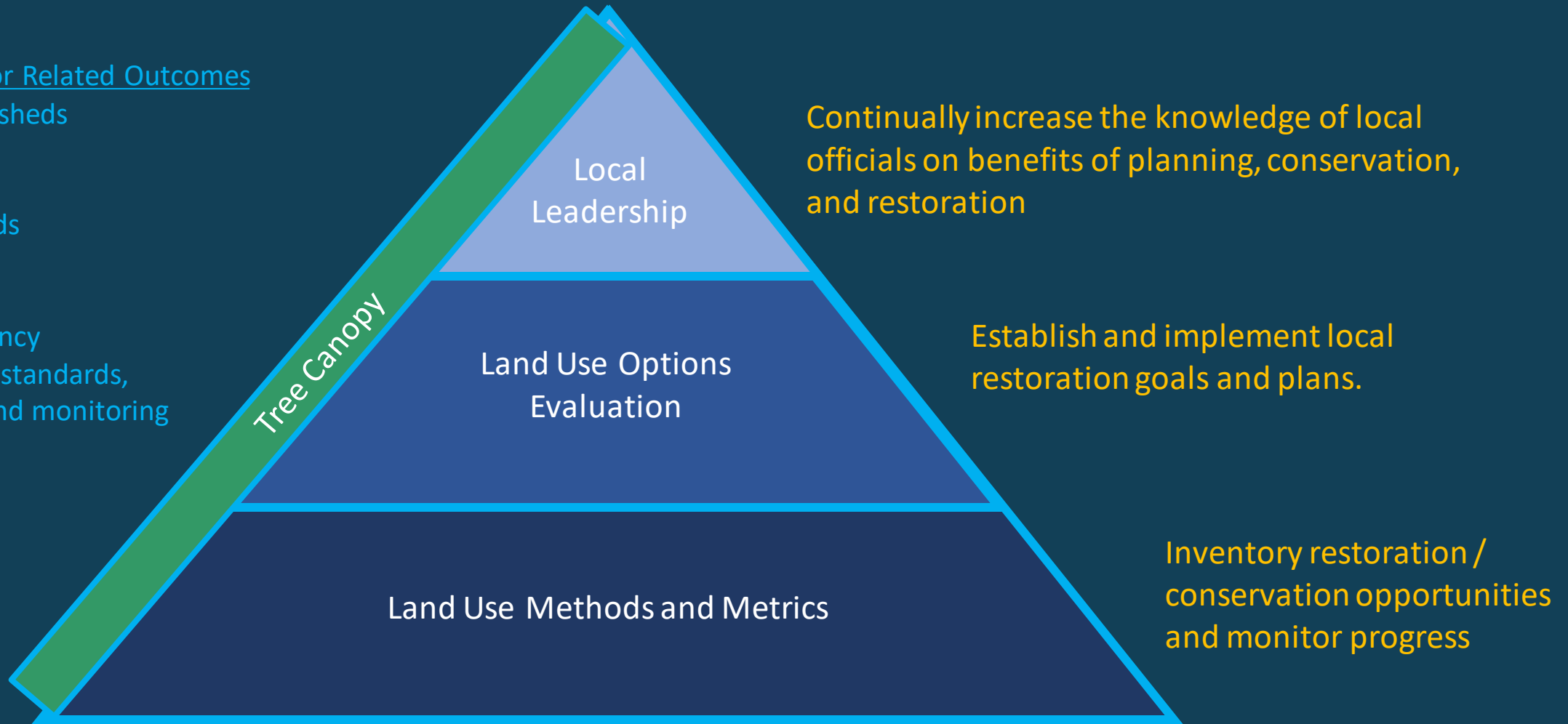
- Healthy watersheds
- Tree canopy
- Forest buffers
- Protected lands
- Black Duck
- Wetlands
- Climate resiliency
- Water quality standards, attainment, and monitoring



Local Action Cohort of Outcomes: Restoration and Conservation Focus

Dependent and/or Related Outcomes

- Healthy watersheds
- Tree canopy
- Forest buffers
- Protected lands
- Black Duck
- Wetlands
- Climate resiliency
- Water quality standards, attainment, and monitoring



Intent of Local Action Cohort

Incentivize and inform land conservation and land use planning to protect water quality and reduce the rate of land conversion by...

1. Monitoring land use change and land conservation (Land Use Methods and Metrics; Protected Lands)
2. Developing data and tools to increase the effectiveness of planning and conservation actions, particularly for protecting water quality (Land Use Options Evaluation; Healthy Watersheds; Tree Canopy; and Water Quality)
3. Communicating the potential of land use planning and conservation to maintain ecosystem services while addressing local priorities (Local Leadership)

From Data to Decisions: Local Action Cohort Strategy

Strategic
Engagement
Team*

Identify target audiences and translators for local action cohort resources and data

Subject
Matter
Experts

Work with translators to develop tools, analyses, presentations, and other materials to communicate resources and data.

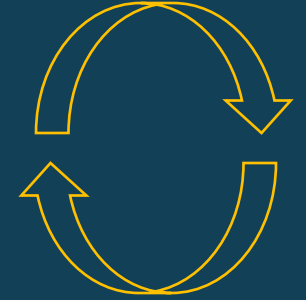
Translators

Identify trusted sources to reach target audiences and follow up with trusted sources and target audience.

MVP's of this process

Trusted
Sources

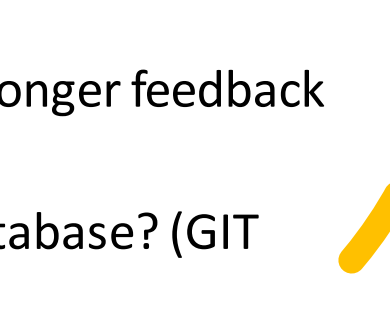
Share knowledge on local priorities, identify communication opportunities, and assist with communication of resources and data.



Iterative Process

*with input from relevant workgroups and goal teams.

2023 Planned Activities

- Combine the LUMM and LUOE Management Strategy and Logic and Action Plans
 - Continued collaboration with local action cohort and SET team
 - Better incorporation of DEIJ and Climate considerations
 - Finalization of LUMM Indicators
 - Investigation of LUOE Indicators
 - Coordinate with the local leadership workgroup while they are redesigning their survey for 2024 to see if there can be specific questions dedicated to informing the LUOE outcome
 - GIT Funding project related to permitting for new developments in the counties that intersect the healthy watersheds?
 - Establishment of a smart growth network (stronger feedback loop)
 - Creation of a development and permitting database? (GIT funding)
- 

STAC Rising Temperatures Report

- Work to decrease stressors
- Emphasize the need to maintain natural landscapes (especially forests and wetlands) and healthy watersheds
- Continue to improve policies that keep these land covers protective of water temperature
- Continue to promote permanent protection of these lands
- The percent increase in development, the loss of forest cover, increases in
- imperviousness are indicated as stressors

Landscape Matters Stressors

- Flow alterations
- Sediments & Toxics
- Elevated Nutrients
- **Increased Temperature**
- Loss of Forest Cover
- Increased Imperviousness
- Road stream crossing density



Landscape Matters Land Conversion Drivers

- Development Decisions
- Economy
- Employment
- Infrastructure
- Political Will

Landscape Matters Moderators

- Infiltration
- 70% Forest Cover (watershed/riparian zone)
- Diverse Cover Wetlands
- Bioretention BMPs
- Valued lands Retention



Landscape Matters Outcomes

- Healthy Streams
- Healthy Fisheries
- Reduced Land Conversion
- Healthy Habitat
- **Lower stream Temps**

Landscape Matters Positive Management Decisions

- Assess Vulnerable Lands
- Prioritize Valued Lands
- Protect High Quality land (forest, wetland, ag)
- Conserve 30% of Valued Lands
- Forecast Effects of development decisions
- Retrofit BMPs where/when needed
- Facilitate addition of temperature to Water Policies
- Facilitate addition of stream temperature to landscape models



Landscape Matters Management Tools

- Geospatial Analysis
- Healthy Watershed Assessment
- EPA WATERS Application
- NAIP Imagery
- LIDAR
- VIMS Shoreline Imagery
- Monitor Land Change -Change Detection
- Political & Public Education

Element 4 Watershed Characteristics and landscape Factors Influencing Vulnerability and Resilience to Rising **Stream Temperatures**



Renee Thompson, Geographer
Lower-Mississippi Gulf WSC, USGS,
Chesapeake Bay Program, MD
Coordinator Maintain Healthy Watersheds
Goal Implementation Team
Rthompso@chesapeakebay.net
Rthompson1@usgs.gov

Discussion