Tahoe Science Advisory Council

Overview and Update

Presentation to the TRPA Governing Board

September 27, 2017

Alan Heyvaert, Ph.D., TSAC co-chair

Geoffrey Schladow, Ph.D., TSAC co-chair

Composition and Membership

Bi-State Executive Committee

- CNRA Secretary (co-chair)
- NDCNR Director (co-chair)
- TRPA Ex. Director
- UC Vice Chancellor
- NSHE Vice President
- USGS Regional Director
- USFS PSW Director

Tahoe Science Advisory Council

- University California Davis
- University California system
- University Nevada Reno
- Desert Research Institute
- US Geological Survey
- USFS Pacific Southwest Research Station
- Non-voting NV representative
- Non-voting CA representative

TSAC Work During Past Year

- TSAC Ex Comm meeting in August 2016
  - ✓ approved FY 2017 work plan
- Established agreements with TSAC entities
- TSAC meetings: November, March, May, July, September
  - ✓ conducted work for TRPA Thresholds update
- Prepared draft work plan for FY 2018
- TSAC Ex Comm meeting in August 2017
  - ✓ approved FY 2018 work plan

TSAC Products from FY 2017

1. Review of TRPA Threshold Assessment Process
    - Chapter 13 of TRPA's 2015 Threshold Evaluation Report (TVAL)
2. Review of Natural Resource Evaluation Systems
    - To provide guidance on best practices

Contributions to Threshold Assessment Process

TSAC memo (Feb 2017) summarized review comments on proposed TRPA Assessment Methodology

- ✓ Provided priority recommendations for assessment methodology
- ✓ Included additional comments to enhance application of the process and interaction with stakeholders

TSAC then reviewed updated Assessment Methodology ver 1.3 developed by TRPA (Mar 2017)

- ✓ Indicated approval of changes based on recommendations
- ✓ Provided additional comments

Review of Best Practices from Natural Resource Management Programs

Evaluated ten resource management programs from around the country:

- Chesapeake Bay Program
- Delta Stewardship Council
- Everglades Restoration Program
- Great Barrier Reef Plan
- Great Lakes Water Quality Agreement
- Lake Champlain Basin Program
- Long Island Sound Study
- Puget Sound Partnership
- San Francisco Bay Estuary Partnership
- Conservation Measures Partnership

Natural Resource Evaluation Systems: Assessment of Best Practices for the Tahoe Regional Planning Agency

Tahoe Science Advisory Council Technical Report 2017-01 | October 2017

Four Core Principles

- **Develop Focused Goals:**

  Identify goals that are specific, measurable, achievable, relevant and time-based.

- **Use Conceptual Models:**

  Describe linkages between program goals and important system components that demonstrate cause and effect relationships.

- **Select Goal-Related Indicators:**

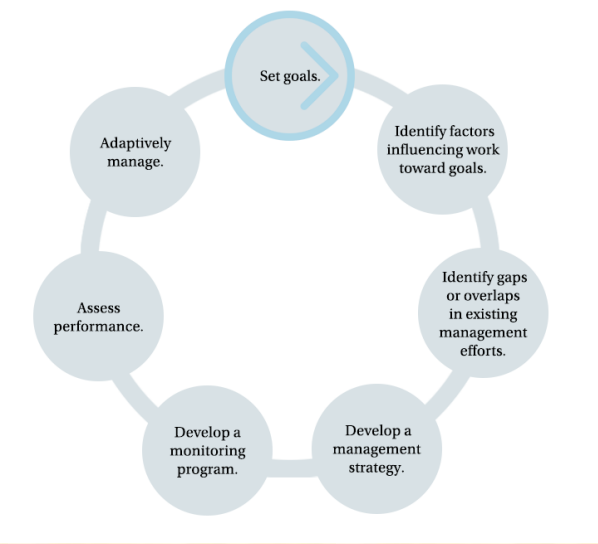
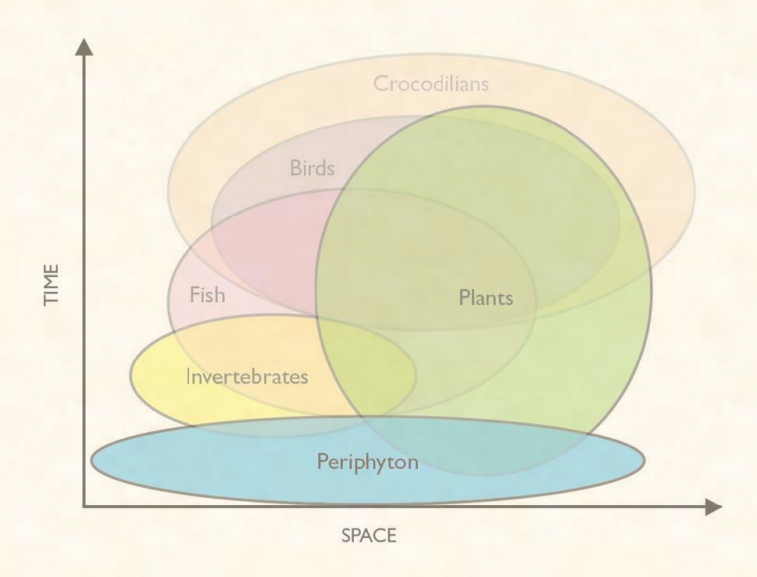
  Good indicators meet the criteria of being measurable, precise, consistent and sensitive.

- **Implement and Commit to Adaptive Management:**

  Essential for transferring information from monitoring and applied research to evaluate outcomes and inform future management actions.

Important Programmatic Characteristics

- Target key indicators
- Use consistent terminology
- Develop prioritization processes
- Use monitoring to assess progress
- Incorporate independent scientific guidance
- Develop diversified funding sources
- Distribute the reporting responsibility
- Implement structured collaborative frameworks

Next Steps for Thresholds Update Support

- Continued collaboration with TRPA staff
- Recommendations on broad-scale strategic opportunities to integrate across disciplines and management themes.
- Technical guidance and focused investigations on TRPA key questions related to Threshold Standards