

# Assessing and Building Capacity: Use of the Solid Waste Sustainable Evaluation Tool

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# Agenda

- Sustainability Background
- Meaning & Priorities
- Solid Waste Approach
- Sustainable Waste Management Program
- Region 8 Pilot
- Sustainable Evaluation Tool Demonstration
- Next Steps
- Questions

# Sustainability Definition, Frameworks, Indicators

## Intergenerational Equity

Brundtland 1987 "development which meets the *needs* of the *present* without compromising the ability of *future* generations to meet their own needs"

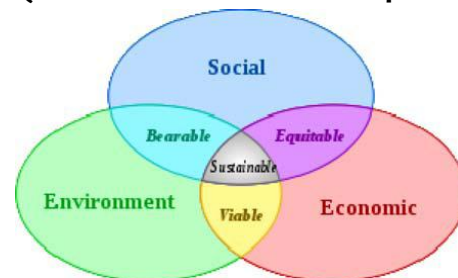
## Biogeophysical

Critical limits of natural capital (carrying capacity); weak/strong  
More narrowly defined and prescriptive

## Multiple Objectives

Integration and tradeoffs of co-existing factors (TBL dimensions - people, planet, prosperity)

More flexible and inclusive



# Typology of Eco-Values

## Environmental Worldviews

### Planetary Management

- We are apart from the rest of nature and can manage nature to meet our increasing needs and wants.
- Because of our ingenuity and technology, we will not run out of resources.
- The potential for economic growth is essentially unlimited.
- Our success depends on how well we manage the earth's life-support systems mostly for our benefit.

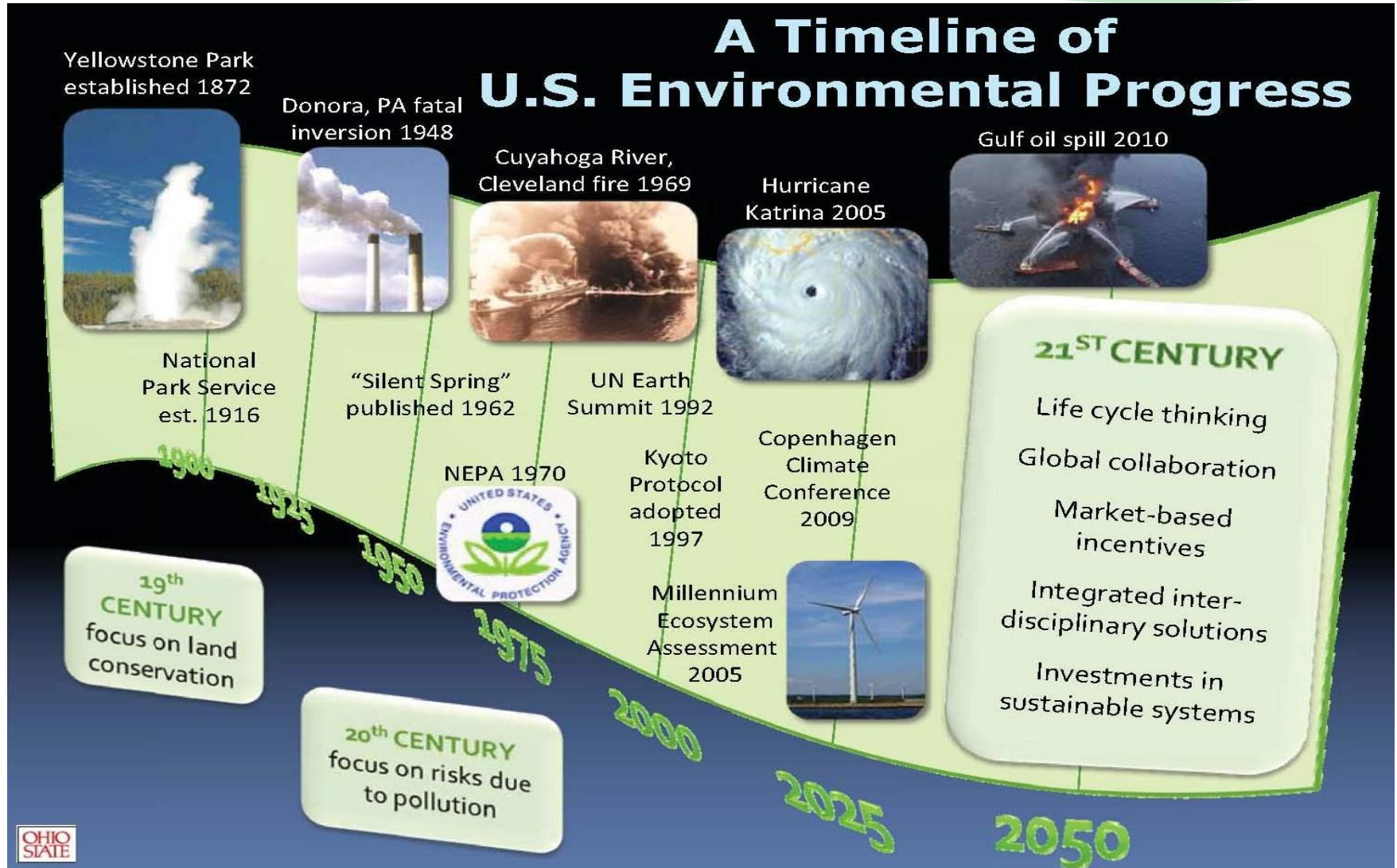
### Stewardship

- We have an ethical responsibility to be caring managers, or stewards, of the earth.
- We will probably not run out of resources, but they should not be wasted.
- We should encourage environmentally beneficial forms of economic growth and discourage environmentally harmful forms.
- Our success depends on how well we manage the earth's life-support systems for our benefit and for the rest of nature.

### Environmental Wisdom

- We are a part of and totally dependent on nature, and nature exists for all species.
- Resources are limited and should not be wasted.
- We should encourage earth-sustaining forms of economic growth and discourage earth-degrading forms.
- Our success depends on learning how nature sustains itself and integrating such lessons from nature into the ways we think and act.

# Chronology of Environmental Priorities

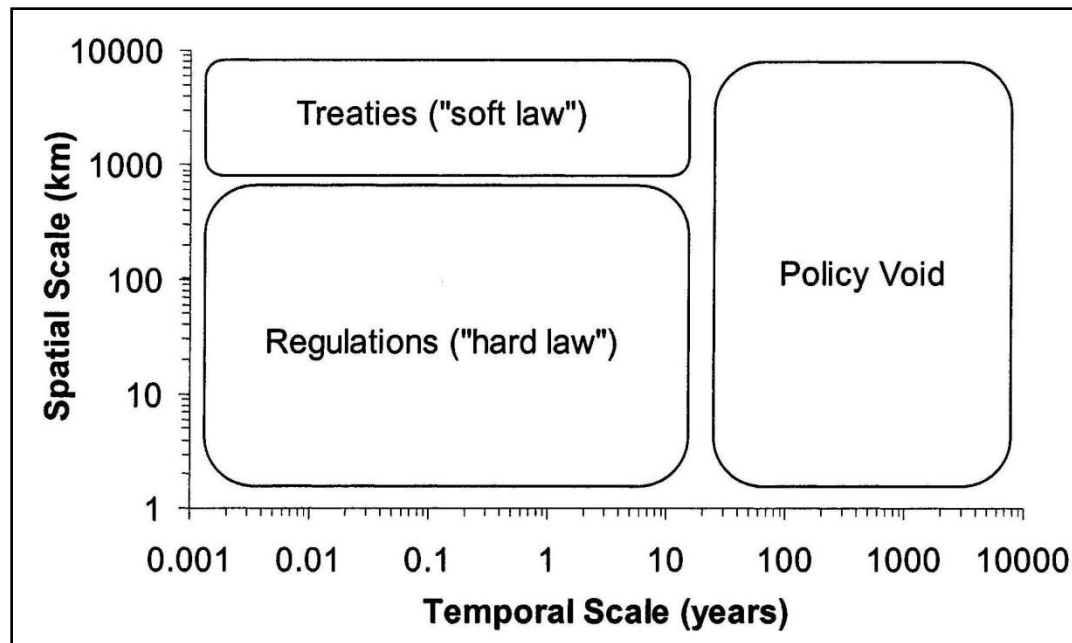




# Sustainability Strategy

## Policy Implications

- Local conditions
- Cultural context
- Hierarchy level
- Spatiotemporal scale



# Sustainability

- What does “sustainability” mean to you and your community?
- Are there barriers--what, where, why?
- What resources/tools are needed to address?

# Tools for Solid Waste Management

- Tribes have identified solid waste issues as a top priority
- 2005 - 2007 Region 8 led the effort between EPA Regions and HQ, other federal agencies and tribes to work together to identify ways to address solid waste issues in Indian country
- Result: Workgroups formed and developed tools
  - IWMP
  - Sustainable Evaluation Tool



# Integrated Waste Management Plan

- A long-term plan that characterizes the current waste management program and assesses future waste management options for the tribal community
- The template identifies the 5 critical elements
- Not just a description of standard operating procedures for handling the current waste stream!

**A complete IWMP includes descriptions of:**

1. Community service area
2. Tribe's solid waste program structure and administration
3. Tribe's current and proposed waste management practices
4. Description of the funding and sustainability, and the long-term goals of the Tribe's solid waste program.
5. Demonstration of approval of the plan by appropriate tribal council or governing body.

# Sustainability Working Group

- Sustainability Workgroup est. 2006
- ‘Help tribes create sustainable, well-managed *infrastructure systems* in order to ensure that reservation populations receive basic public services in a manner that is *environmentally protective* and *economically viable*’
- Need to *comprehensively* evaluate the sustainability of a solid waste management program.

# What is a Sustainable Solid Waste Management Program?

- Sustainable waste management systems tend to share attributes in 7 key indicator areas:
  - Planning
  - Financial viability
  - Management
  - Staffing
  - Operations
  - Coordination
  - Compliance & Enforcement

# Sustainable Evaluation Tool

## Goals of the Tool:

- Evaluate a *current* program for evidence of the 7 key indicators of a sustainable program
- *Self Assessment* to supplement other review processes or establish a baseline
- Report *results* to identify areas of success and weakness

# Pilot Testing

- R8 Tribes volunteered to participate in a pilot study to test the tool
- Tribes completed the Sustainable Evaluation Tool with initial assistance and facilitation from EPA
- Some of the Tribes have completed the tool independently and shared results

# Summary of Pilot Results

- Averaged results indicated that *planning* and *compliance & enforcement* are areas with the weakest scores and the greatest need for assistance
- Results are used to identify areas of *opportunity* for targeted assistance, specific areas where training, technical assistance, and financial resources would have the greatest impacts



# Overall Scores & Summary of Results

Key Indicator/Rank (lowest to highest)	% of Total Possible
Planning (2)	51.9%
Financial Viability (5)	60.2%
Management (7)	80.8%
Staffing (6)	70.1%
Operations (4)	59.9%
Coordination (3)	53.0%
Compliance & Enforcement (1)	47.2%
<b>Overall Score</b>	<b>59%</b>



# Planning

## Evaluation Criteria

- Integrated waste management plan is in place (with good information on demand for services and expected changes over time).
- A capital improvements plan is in place
- Operation and maintenance plans are in place.
- IWMPs are integrated with other tribal plans (such as natural resources, housing, hotel/casino expansions, etc.).
- Plans take into account the impact of future development on the waste management program or utility.
- There is evidence that plans are being used for decision-making.
- Plans are revisited and updated on a regular basis.

## Recommendations

- Provide technical assistance for drafting plans (IWMP, capital improvement plans, staffing plans, operations and maintenance plans).
- Identify plan implementation best practices and provide support to revisit and update plans on a regular basis.
- Discuss strategies for tracking plan implementation.
- Share resources for how to calculate potential impacts of future development.
- Evaluate model plans and their role in established programs.

# Financial Viability

## Evaluation Criteria

- Budget – Waste management program has annual operating budget (with contingencies and equipment costs built in).
- User fees and other income sources are adequate to cover costs.
- Reliable federal or other non-tribal sources are available to help fill necessary gaps in funding.
- Rates are fair, affordable, and adjusted as needed.
- Equitable provisions are made for people who can't afford to pay and the lost revenue is provided to the waste management program or utility from another source.

## Recommendations

- Support for development of a rate structure that includes rates that are affordable and adjust as needed.
- Provide planning support to develop adequate reserve accounts for contingencies and capital improvements.
- Share approaches and tactics for how equitable provisions are made for the elderly and low income.
- Discuss how collaboration between tribal departments and tribal enterprises can provide in-kind solutions with cash value to reduce costs.
- U.S. Department of Agriculture Rural Development (USDA RD) grant application process

# Management

## Evaluation Criteria

- Utility board (or other authority independent of Council) has power to make decisions.

## Recommendations

- Discuss the benefits of a utility board or independent body and strategies for developing such a board.

# Staffing

## Evaluation Criteria

- A staff *training* plan is developed and followed.
- Staffing is appropriate (both in terms of number and skill mix) to meet program needs.

## Recommendations

- Create templates and model staff training plans to support staff training plan development.
- Conduct trainings in a forum, which maximizes staff time and financial resources.



# Operations

## Evaluation Criteria

- Operations are cost effective and meet demand (no gaps in service occur).
- Waste minimization and pollution prevention are incorporated to extent feasible.
- Operations are regularly evaluated and improved as needed.

## Recommendations

- Provide training on how to conduct a comprehensive evaluation of the waste system.
- Best practices for implementing measures to reduce waste or pollution.
- Identification of resources for addressing unresolved problems.

# Coordination

## Evaluation Criteria

- There is good coordination with Council and other tribal departments that manage or generate waste (e.g. Health, BIA, Housing, Casino)
- Effective outreach is made to stakeholders regarding rates, services, billing and collection policies, etc. and stakeholders support the program.

## Recommendations

- Discussion of best practices for coordination with other tribal departments.
- Best practices for coordination with stakeholders to create a sustainable program that is consistent with tribal mission and beliefs.
- Implementation support for changes in long standing behavior and practices.

# Compliance & Enforcement

## Evaluation Criteria

- A tribal enforcement program is in place and effective (including tribal laws and a court system that understands and appreciates waste issues).

## Recommendations

- Refer to model codes and provide waste code development training.
- Provide code implementation support and best practices.
- Enforcement training including a “train the trainer” for enforcement officers to share their knowledge of enforcement with tribal police and courts.

# Tool Demonstration

- ***Why should I use it?*** Understand your program, bring departments together, baseline, leverage \$, improve Tribal/EPA efforts; Tribal champions
- ***How does it work?*** User-friendly format, spreadsheet
- ***Who uses the tool?*** Tribes nationally, other groups
- ***What is the scoring system?*** 102 questions in 7 categories (no=0; yes but inadequate=1; yes adequate/effective=2; not applicable); Total/204-(2\*NA)
- ***Where can I learn more?*** EPA Region 9 contacts
- ***When should I start?*** If already completed, review results; if not, we will coordinate meeting

# Questions & Contact Info

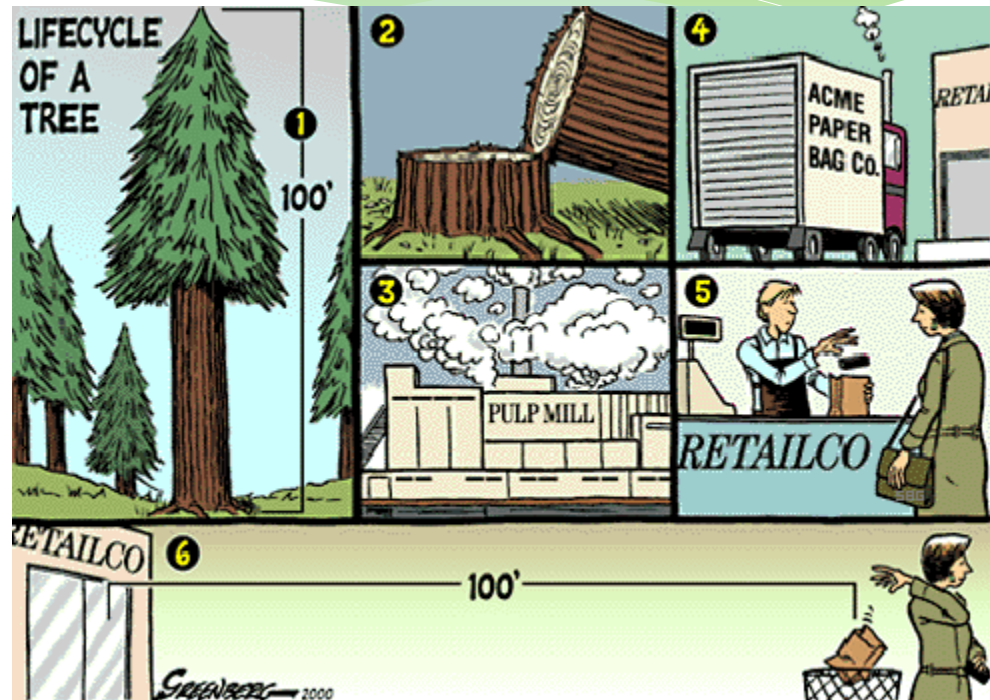
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***Think globally, act locally, and plan regionally***