INSTITUTE FOR TRIBAL ENVIRONMENTAL PROFESSIONALS
TRIBAL SOLID WASTE AND EDUCATION ASSISTANCE

Developing and Implementing a Tribal Integrated Solid Waste Management Plan
Palm Springs, CA
April 12-14, 2016

Course Agenda

Course Instructors:
Roberta Tohannie, ITEP
Joshua Simmons, Prosper Sustainably

Day 1: Tuesday, April 12

8:30 – 9:00am Participant and Instructor Introductions

9:00 – 9:45am Session 1: Course Details and Integrated Solid Waste Management Overview
Instructor(s): Roberta Tohannie
- Course Agenda
- The EPA's Five ISWMP Elements
- Intro to Integrated Solid Waste Management
- What is the Purpose of an ISWMP?
- Significance of ISWMPs for Tribes

9:45 – 10:30am Session 2: ISWMP Development and Pre-Planning
Instructor(s): Josh Simmons
- Pre-Planning
  - Preliminary Scoping / Planning Boundaries
- Planning Process and Timeline
  - Roles, responsibilities, timeframe, deadlines, etc.
- ISWMP Planning Team Generating buy-in
- Information Gathering
  - Info Sources, Internal v. External, Existing v. New
- Structuring Your ISWMP
  - Examples and Template

10:30 – 10:45am BREAK

10:45 – 11:15am Session 3: Community Profile and Service Area
Instructor(s): Roberta Tohannie
- History, Geography, Climate, Natural Resources, Land Use, Demographics, Government, Economy

11:15am – 12:00pm Session 4: Program Administration, Laws, and Enforcement
Instructor(s): Josh Simmons
- Program Administration (current & future)
  - Organization Chart, Decision-Making, Roles & Responsibilities

- Constitutional v. Constitutional Tribes
- Partnerships (current & future)
- Waste Laws, Compliance, and Enforcement (current & future)

12:00 – 1:00pm LUNCH

1:00 – 2:45pm <u>Session 5</u>: Current and Waste Management Practices and Conditions
Instructor(s): Josh Simmons

- Current Waste Generation and Management
  - Generators, Waste Streams, Generation Rates
    - Activity / Discussion
    - Types of Generators & Waste Streams; Determining Generation Rates
      - Waste stream assessment and characterization
      - Non-hazardous wastes
      - Special and hazardous wastes
  - Open dumps and uncontrolled wastes
  - Waste Management Strategies & Practices (including roles & responsibilities)
    - Activity / Discussion
    - Source Reduction
    - Reuse, Recycling, Disposal, Unaddressed
    - Identifying Limitations and Deficiencies
  - Current Waste Management Costs and Funding/Revenue Sources
  - Case Study

2:45 – 3:00pm BREAK

3:00 – 4:15pm Group work and discussion

4:15 – 4:45pm <u>Session 6</u>: Waste Assessment and Characterization
Instructor(s): Josh Simmons

- Hands-on Training Preparation
- Safety, Rules, and Protocol

4:45 – 5:00pm Reflective Writing

Day 2: Wednesday, April 13, 2016

8:30 – 9:00am Questions and Answers from Reflective Writing

9:00 – 10:30am Session 7: Future Waste Management Practices and Conditions
Instructor(s): Josh Simmons

- Long Term Goals and Priorities
- Future Waste Generation and Management
    - Generators, Waste Streams, Generation Rates
        - Identifying and Projecting Possible Changes
        - Identifying and Strategies/Options
            - Source Reduction, Reuse, Recycling, Disposal, etc.
            - Feasibility Studies
    - Open Dumps, Uncontrolled Wastes, and Other Issues
        - Identifying and Projecting Possible Changes
        - Identifying and Strategies/Options
    - Improvements Beyond Basic Compliance
    - Future Waste Management Costs and Funding/Revenue Sources
        - Funding Your Plan
            - Calculating Costs and Revenue
            - Identifying Possible Funding Sources
- Case Study

10:30 – 10:45am BREAK

10:45 – 11:30am Session 8: Public Outreach Strategies
Instructor(s): Roberta Tohannie

- Current & Future
    - Current Public Outreach Strategies
    - Identifying Future Public Outreach Strategies Options
- Community members
- Tribal Council
- Businesses and partnerships

11:30am – 12:30pm Lunch (on your own)

12:30 – 12:45 pm Load up on bus

12:45pm – 6:00pm Hands-On Field Trip – Waste Stream Assessment/Characterization at Santa Rosa Cahuilla Reservation

Day 3: Thursday, April 14, 2016

8:30 – 8:45am Logistics and Travel Issues

8:45 – 10:00am Session 9: Waste Assessment Debrief
Instructor(s): Josh Simmons
- Group Discussion Organizing, Analyzing, and Integrating Data
- Utilizing for Future Waste Management Strategies

10:00 – 10:15am BREAK

10:15am – 12:00pm Session 10: Selecting Options, Drafting, and Revising Your Plan
Instructor(s): Josh Simmons
- Selecting Options and Strategies
  - Administration
  - Waste Laws, Compliance, and Enforcement
  - Education & Outreach
  - Funding and Partnerships
  - Plan Review & Updates
- Developing a Living Action Plan
- EPA-Tribal Environmental Plan (ETEP) Considerations
- Introduction, Purpose, Executive Summary
- Additional Information / Appendices
- Monitoring and Evaluation
- Reviewing and Updating the Plan
- Implementing the Plan (who, how, etc.)
- Case Study(ies)

12:00 – 1:00pm LUNCH

1:00 – 1:30pm Session 11: Plan Approval
Instructor(s): Roberta Tohannie
- Who approves the plan and how?

1:30 – 2:30pm Tribal Case Studies – ISWMP Start to Finish Walkthrough (tying it all together)
Instructor(s): Josh Simmons
- ISWMP Start to Finish Walkthrough (tying it all together)
- Ongoing Implementation

2:30 – 2:45pm BREAK

2:45 – 4:30pm Group work and discussion

4:30 – 4:45pm Activity: Develop and Share ISWMP Development Strategy / Next Steps

4:45 – 5:00pm Reflective Writing, Evaluations, and Course Closing

INSTITUTE FOR TRIBAL ENVIRONMENTAL PROFESSIONALS
Tribal Waste and Response Assistance Program (TWRAP)

Developing and Implementing a Tribal Integrated Solid Waste Management Plan

April 12-14, 2016
Palm Springs, CA

SESSION 1:

Course Details and ISWMP Overview

Roberta Tohannie, ITEP

COURSE AGENDA

- Presentations
- Small group discussions
- Waste Characterization Event: Wed., 4/13
- Reflective Writing
- Travel reimbursement overview

INTRO TO ISWMP

What is Solid Waste?

- As defined under the Resource Conservation Recovery Act (RCRA)
  - Any solid, semi-solid, liquid, or contained gaseous materials discarded from industrial, commercial, mining, or agricultural operations, and from community activities. Solid waste includes garbage, construction debris, commercial refuse, sludge from water supply or waste treatment plants, or air pollution control facilities, and other discarded materials.
- According to Zero Waste America
  - A resource that is not safely recycled back into the environment or the marketplace.

INTRO TO ISWMP

What Is Municipal Solid Waste (MSW)?

Defined as:

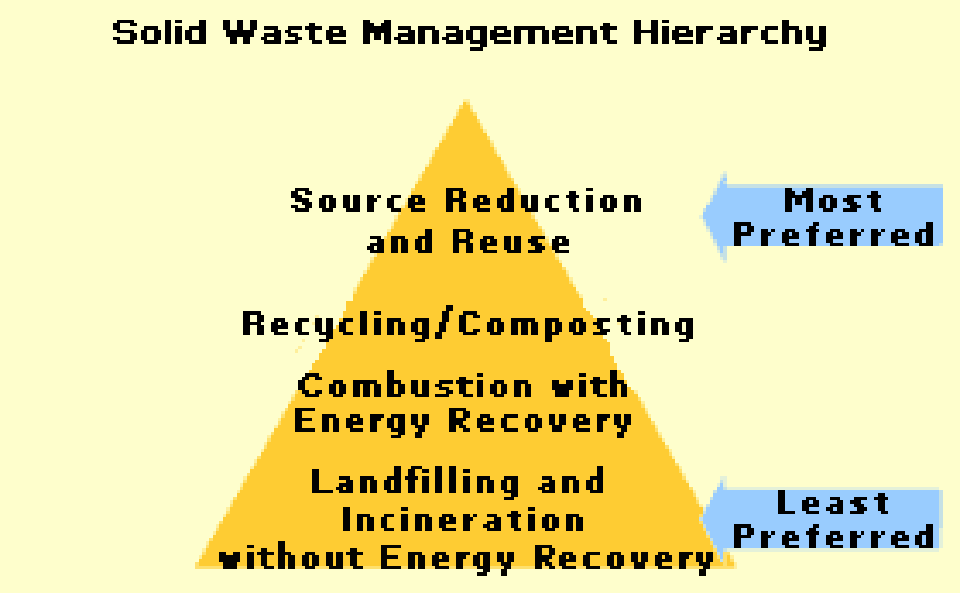
- Durable goods (e.g., appliances, tires, batteries)
- Non durable goods (e.g., newspapers, books, magazines)
- Containers and packaging, food wastes, yard trimmings, and miscellaneous organic wastes from residential, commercial, and industrial non process sources

INTRO TO ISWMP

- To address the increasing quantities of MSW, the U.S. EPA recommends that communities adopt **"integrated waste management"** systems tailored to meet their needs.
- The term "integrated waste management" refers to the complementary use of a variety of waste management practices to safely and effectively handle the MSW stream.
- An integrated waste management system will contain some or all of the following elements: source reduction, recycling (including composting), combustion, and/or landfilling.
- Source reduction and recycling are preferred over combustion and landfilling

INTRO TO ISWMP

February 1989: U.S. EPA's *Agenda for Action* called for "a new solid waste management ethic" that reflected in what has come to be referred to as the "solid waste management hierarchy"



INTRO TO ISWMP

An ISWMP Describes:

- Current and recommended methods, arrangements, and facilities for waste reduction
- Recycling
- Refuse collection
- The transportation, processing, and disposal of waste, and
- The organization, administration, and funding of the solid waste system operations, programs, and policies.

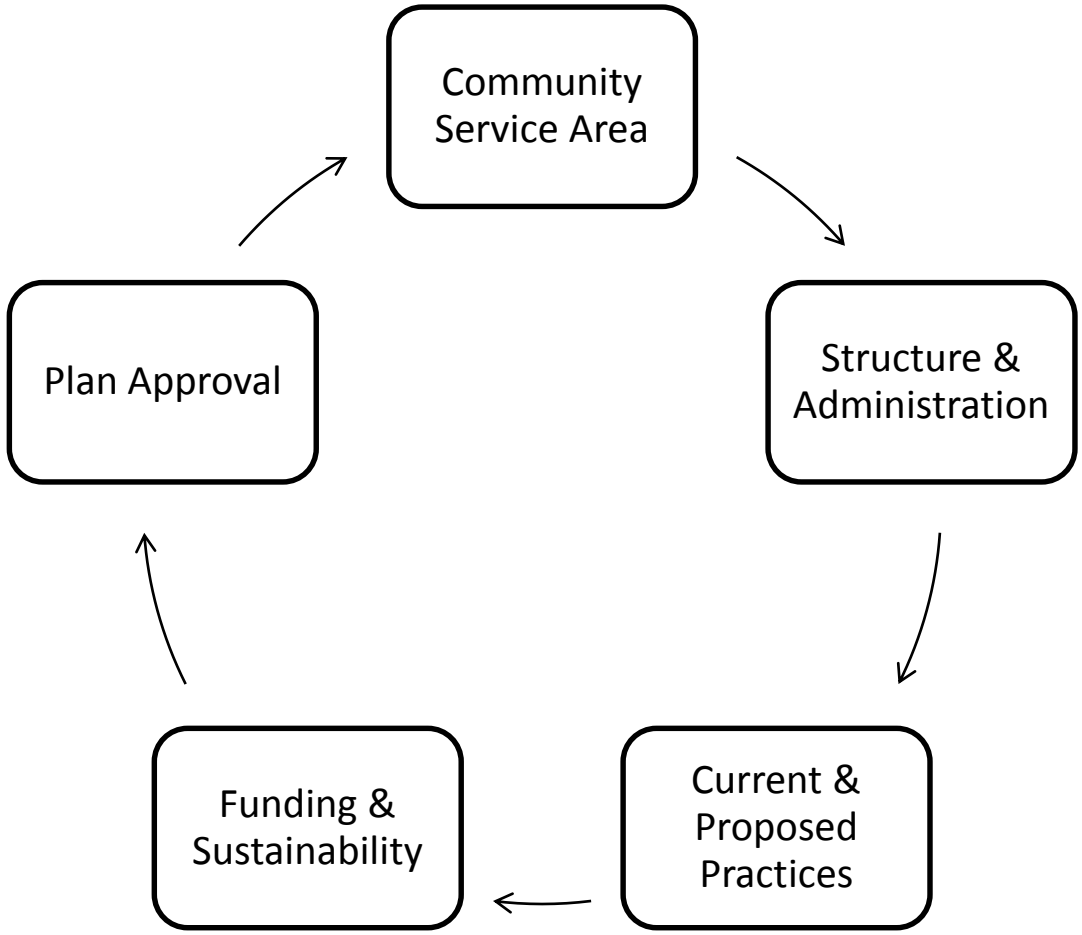
PURPOSE OF AN ISWMP

The Process

- A tool that will enable you to evaluate needs, detail current structure and practices, prioritize concerns, plan for the future, and consider ways to implement activities. For example, some ISWMPs cover a 20 year span of time and are reviewed every 5 years.

- It sets the tone for community and governmental acceptance/support as well as the internal administration and implementation of the plan.

FIVE ISWMP ELEMENTS



WHERE DID THESE ELEMENTS COME FROM?

- 2005 USEPA Strategic Target: “By 2011 increase by 118 the number of tribes covered by an integrated waste management plan compared to FY06.”
- In the fall of 2005 the USEPA Regions submitted 22 tribal ISWMPs for consideration -Five “critical elements” common to these were identified.
- Other agencies were asked their opinion, as well as tribal committees and training organizations.
- “The use of these criteria is meant to be optional but optimal.”
- Key point: your plan should be relevant to your situation and a useful tool for your planning

COMMUNITY SERVICE AREA

Creating a Profile of the Land

- Populations and Households
  - How many people need to be served? How much growth is expected?
  - Where are the homes that need service? Is housing increasing?
- Community and Natural Resources
  - Developing community pride in the program.
  - What community assets you can work with?
  - A program that complements protection of natural resources.
- Geography, Climate, Cultural and Land Use Concerns
  - How will geographic features affect the program?
  - How will climate affect collection, storage, transfer, and disposal?
  - What cultural and land use concerns need to be factored into the plan?
- Economy
  - How can the local economy support the plan?
  - What special economic or business concerns need to be addressed?
  - How will economic development affect the program?

STRUCTURE & ADMINISTRATION

Establishing Your Framework

- Developing a Planning Team
  - Who needs to be involved in the planning process?
  - How will the community be involved?
- Program Administration
  - Who will manage the program? (e.g. utilities, environment, land use, or a special board)
  - Developing job descriptions, accounting practices, certification/training needs, etc.
- Codes and Ordinances
  - What types of codes are currently in place?
  - Using the ISWMP to map out current regulatory gaps.
- Compliance and Enforcement
  - Defining goals in both compliance and enforcement.
  - Establishing and delegating authority.

CURRENT & PROPOSED PRACTICES

Assessing and Determining Waste Handling and Disposal Processes

- Waste Stream Characterization
  - Generators: residential, commercial and industrial
  - Weight/volume and composition
  - Possibilities for diversion
- Illegal Dumping and Open Dumps
- Special and Hazardous Wastes
- Waste Reduction Strategies
- Limitations of Current Operations
- Planning for the Future
- Public Participation and Developing Partnerships

FUNDING & SUSTAINABILITY

Making Sure Your Goals Can Be Met

- Funding Your Plan
  - Grant money?
  - Tribal funding?
  - Pay as you go?
- Long-Term Goals and Priorities
  - Establishment of transfer stations?
  - Regulated landfill?
  - Waste reduction activities?
- Improvements Beyond Basic Compliance
  - Conservation and innovation
- Additional Resources
  - Partnerships with other entities?

PLAN APPROVAL

Putting It All Together And Getting It Approved

- Putting the Pieces All Together
- Generating Support for the Plan
- Documenting Community Involvement and Support
- Who Approves the Plan?
- Who Implements the Plan?

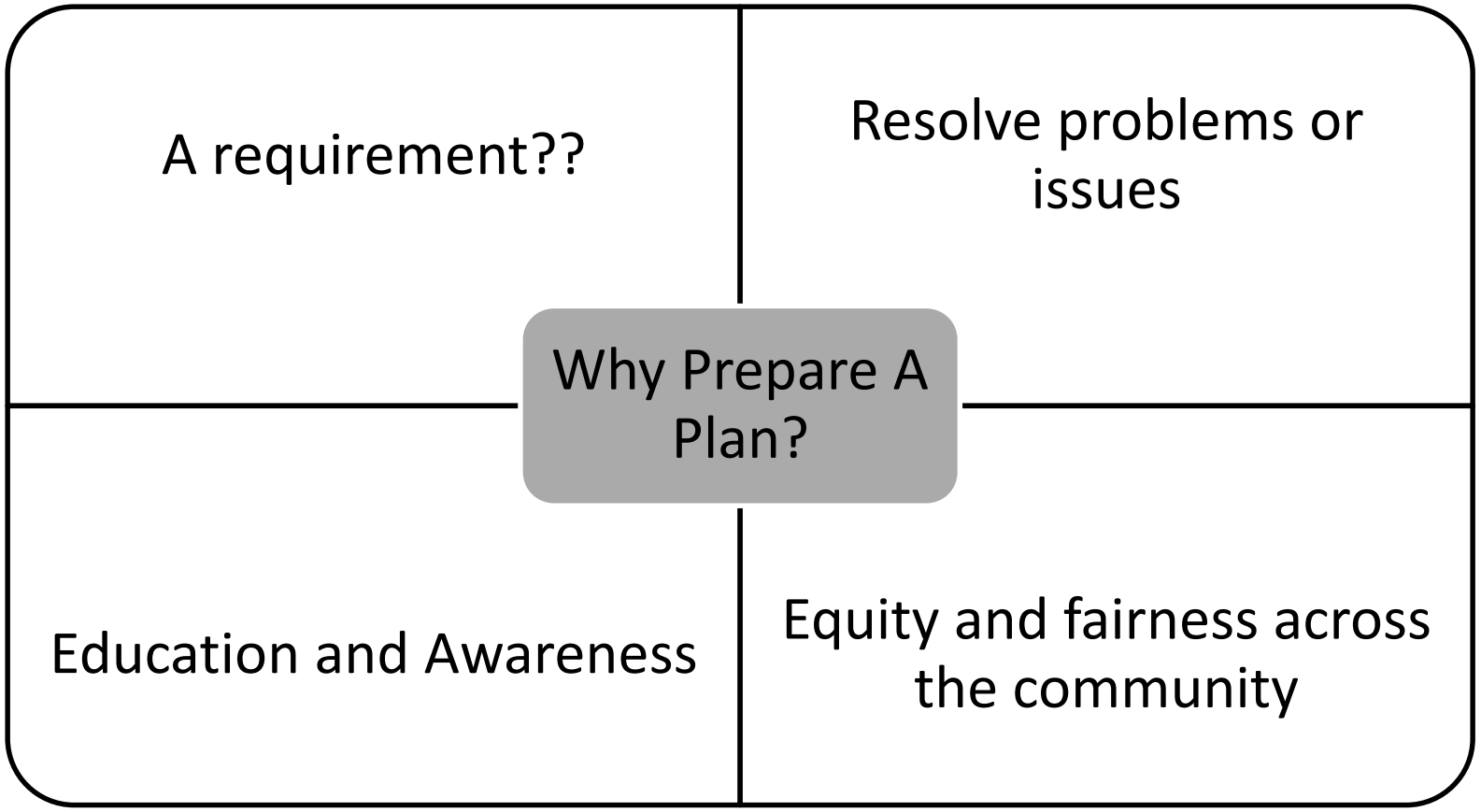
SIGNIFICANCE OF ISWMPs FOR TRIBES

Solid waste management touches all aspects of tribal and village life – public health, environmental quality, economic development and prosperity, community pride and identity, tribal culture, and land stewardship. But tribes often have limited resources. Equally important competing interests, such as education, physical and mental health, employment, and economic development, often take precedence over solid waste and exhaust tribal funds."

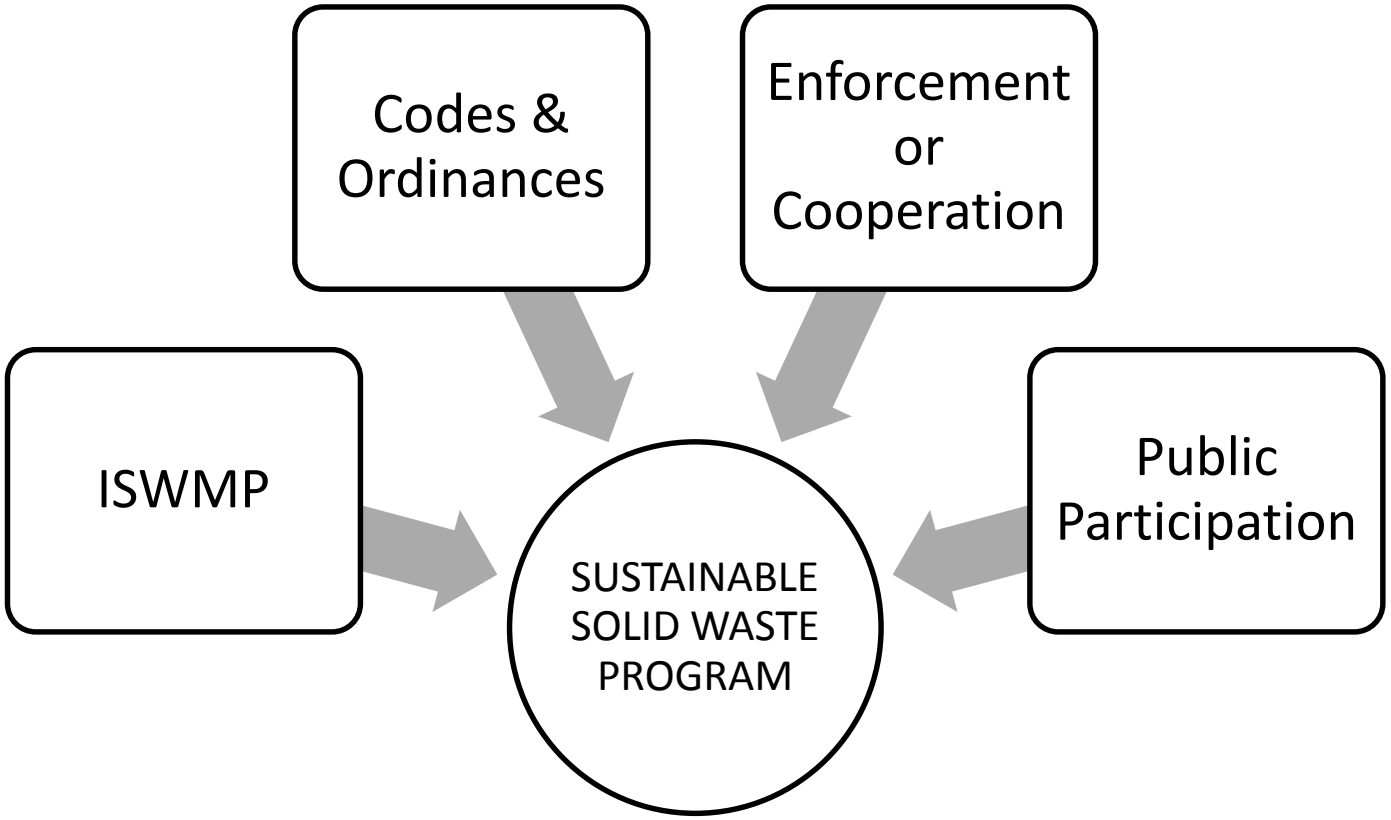
From "EPA Tribal Decision-Maker's Guide to Solid Waste Management"

archive.epa.gov/wastes/wyl/web/pdf/trib-dmg.pdf

SIGNIFICANCE OF ISWMPs FOR TRIBES



TRIBAL SOLID WASTE MANAGEMENT



Any Questions?

SESSION #2:
ISWMP Pre-Planning, Buy-In, Information Gathering, Plan Structure

PRESENTED BY:

Josh Simmons
Principal Consultant / Attorney / Collaborative Strategist
www.ProsperSustainably.com

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New v. Revised ISWMP
Same Considerations & Strategies

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Preliminary Scoping

- **Determine planning boundaries**
  - What will be the geographic boundaries of your ISWMP?
  - What entities and activities will be addressed?
- **Determine the planning timeline**
  - When will you start?
  - When will you complete a draft?
  - What will be the review period?
  - When will the final plan be adopted by?
- **ACTIVITY**
  - Answer these questions in your groups
  - Report answers back to class

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Planning Boundaries

- Geographic Boundaries
  - Jurisdictional considerations
- Inclusion/Exclusion of Activities and Entities
- Consider available resources in determining scope of ISWMP
  - E.g. funding, personnel, time,
- Bureaucracy and Politics
- Access to Information
- An ISWMP should be a "living" plan that will be revised periodically
  - May not be necessary or possible to cover everything
- Case Study

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ISWMP Development Timeline

- Timeline (start, end)
  - Pre-Planning
  - Information Gathering
  - Drafting → First Draft
  - Stakeholder Review → Finalize Draft
  - Submit for Approval → Obtain Approval
  - Periodically Review and Update
- What is driving this planning process?
  - Example driving forces:
    - The ISWMP grant funded for a specific period
    - Need to complete ISWMP asap to get GAP funding
- Case Study

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ISWMP Planning Team

- **Who will be directly involved in developing the ISWMP?**
  - Who will gather information and draft the plan?
  - Who will determine the scope of the plan?
  - Who will decide the goals and priorities?
  - Who will identify and select waste management options?
- **Who else should be involved?**
  - What partners and stakeholders do you need information from?
  - Who do you want to review the plan and provide feedback?
  - Who will be approving the plan?
- **ACTIVITY**
  - Answer these questions in your groups
  - Report answers back to class

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ISWMP Planning Team

- Those directly involved in ISWMP development
  - Scoping, Info Gathering, Drafting, Goal-Setting, Developing Strategies
  - Consider waste program administration and management (discussed later)
- Roles and Responsibilities
  - Project Lead
  - Support Team Member(s)
  - Strategy Decision-Maker(s)
  - These may all be the same person
- Important to size team appropriately
  - Too Many: unclear roles, group-think, too slow
  - Too Few: too little buy-in, lack of info or resources
- Communication and accountability are essential

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Partners & Stakeholders

- Partners and Stakeholders (not part of the core planning team)
  - Info Providers, Reviewers, Approvers, Implementers, etc.
  - Consider waste program administration and management (discussed later)
- Identify partners/stakeholders and establish connection
  - Notify of planning process early-on; Involve strategically
  - Communicate needs, roles, and expectations for involvement
    - Be clear on partner/stakeholder roles, especially with respect to decision-making
- Communicate regularly; Provide key updates; Answer questions
- What to do if a partner/stakeholder become non-responsive
  - Determine whether their involvement or information is essential
    - If yes →
      - First, seek to re-engage in planning process
      - If unsuccessful, seek to compel participation
    - If no → focus efforts elsewhere

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ISWMP Planning Process

- Map out timeline/milestones and roles/responsibilities
  - Link specific roles to specific milestones with deadlines (be realistic)
- Determine when and how to involve partners and stakeholders
  - Determine who will be responsible for managing each partner/stakeholder
  - Insert this information into the ISWMP Planning Map
- Schedule regular ISWMP planning team meetings
  - Report progress in achieving milestones (to be done by everyone)
  - Evaluate progress and adjust map accordingly
    - Re-assign tasks, adjust timeline, etc.
- Case Study – Timeline, Planning Team, Process

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Generating Buy-In

- Core Planning Team; Partners and Stakeholders
  - Focus mostly on Decision-makers, Approvers, and Implementers
- More buy-in → Easier approval → More success in implementation
- Involvement → Buy-In
- Communicate that this is living plan that can and will be changed
  - To reflect changed circumstances, options, strategies, etc. (as needed)
  - Can decrease concern that once a decision is made it is unchangeable
- Activity/Discussion:
  - What strategies have you use to generate buy-in on a project?
  - What are strategies may work for your ISWMP?

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Information Gathering

- What information will you need to develop your ISWMP?
- Where can you get this information?
  - What documents? What people?
- ACTIVITY
  - Answer these questions in your groups
  - Report answers back to class

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Information Gathering

- **Types of Information**
  - E.g. plans, studies, data, reports, interviews, policies, procedures, bills, surveys, observations, prior ISWMPs quantitative, qualitative, etc.
- **Location of Information**
- **Internal v. External**
  - Internal info – is already in the planning team's possession
  - External info – is in some else's possession (will require an info request)
- **Existing v. New Information**
  - Existing info – available in a usable form, just needs to be retrieved
  - New info – does not currently exist and/or is not in a usable form
    - May need to conduct a new analysis, calculation, study, etc.
    - Consider necessity and available resources for gathering

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Information Gathering

- Keep track of your information gathered and requested
  - Name and brief description of information
  - Date received and/or requested
  - Location of information
  - Status of information (requested, received, reviewed)
- Use an information gathering document
- Example / Case Study

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ISWMP Structure / Template

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Thank You!
Questions?

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Tribal Waste and Response Assistance Program (TWRAP)

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SESSION 3:

COMMUNITY SERVICE AREA

Roberta Tohannie, ITEP

DEVELOP A PROFILE OF THE SERVICE AREA

The goal is to gather as much information of the tribe and/or community to:

- Estimate or determine the present and future waste stream
- Site waste handling facilities
- Identify transportation routes and distances to potential facilities and disposal sites
- Assess specific economic needs and to predict particular solid waste needs of industrial generators

DEVELOP A PROFILE OF THE SERVICE AREA

- **Key considerations**
  - Population and Demographics
  - Community Assets and Resources
  - Households and Housing
  - Population Projections and Estimated Growth Rate
  - Economy
  - Climate
  - Geography and Land Use
  - Geology and Natural Resources
- **Understanding these factors is critical to prepare the plan and inform readers of needs**
- **It also provides background information you will need to answer various questions that will come up as you are identifying potential alternatives and waste management options for your community.**

POPULATION AND DEMOGRAPHICS

Establish the number of people to be served by the solid waste program. Use these resources to determine population and demographics:

- BIA Population and Labor Force Report
- U.S. Census Bureau: factfinder.census.gov/

Census Year 2000 Demographic Profile Highlights

Go to the website and visit the following links:

- Population Menu (left), click, “Population Finder,” enter city/state, and click “Fact Sheet.”

POPULATION AND DEMOGRAPHICS

What is the projected population growth of your service area?

- http://www.census.gov/population/www/projections/popproj.html
- http://www.census.gov/popest/counties/asrh/CC-EST2009-alldata.html

Off reservation populations

- Effects of tourists
- Community members working and shopping off reservation

POPULATION AND DEMOGRAPHICS

Understanding your demographics

- Age groups
  - Differing attitudes to waste issues?
  - Different access issues?
- Income, employment, education
- Tribal membership status
- Number of visitors – seasonal fluctuations?

Consider populations in relation to land ownership issues you may have to deal with

POPULATION AND DEMOGRAPHICS

What if this information does not exist on any government or public document? What sources can provide you useful data?

- If eligible to do so, conduct a community survey/assessment
- Talk to knowledgeable community members
- Hire private consultant, graduate students, etc.
- Conduct field studies

Consider the advantages and disadvantages of these activities to determine population and demographics

COMMUNITY ASSETS AND RESOURCES

Identify key factors that could assist with increasing awareness, pride, and community involvement in maintaining a successful SWM program:

- Educational partners
- Culture and history
- Social programs
- Tribal Leadership/Governance

COMMUNITY ASSETS AND RESOURCES

Educational Partners:

- Schools, parent-teacher groups, tribal colleges, etc.
- Cultural centers, museums, senior centers, etc.
- Businesses, NGOs, non-profit groups, etc.

Culture and History:

- Dates of existence and ancestral land locations
- What languages are spoken?
- What groups (Native and non-Native) live within the tribe's boundaries or community?

COMMUNITY ASSETS AND RESOURCES

Social and Relevant Tribal Programs:

- Health centers
- Utility authorities
- Law enforcement, court systems, etc.
- Emergency response

Tribal Leadership/Governance:

- Tribal or IRA (Indian Reorganization Act) council
- Describe their council responsibilities and authority
- Describe length of terms

HOUSEHOLDS AND HOUSING

Housing types and locations will guide decisions on collection methods, fee structures, revenue projections, and source reduction activities.

- Is housing clustered in certain communities or widely spaced?
- How much housing is single family versus multi-family?
- How many are owned versus rented?
- How many are occupied versus vacant?

Will building projects affect your solid waste program?

Specific information about housing clusters and households can be found on the U.S. Census Bureau, tribal housing office, tribal planning office, and HUD.

POPULATION PROJECTIONS AND ESTIMATED GROWTH

A possible formula to calculate growth rate or percent change:

Percent change: (value at end of period – value at beginning of period)/value at beginning of period * 100
Percent change: (Vpresent-Vpast/Vpast x 100
Vpresent = present or future value, Vpast = past or present value

Example: A city has a population of 800,000 in 1990 and a population of 1,500,000 in 2008. To find the growth rate of the population in this city, do the following:

Growth rate = (1,500,000 – 800,000/800,000 x 100 = 87.5%
To calculate annual percentage rate of change, divide the change by N (it represents the number of years between the two values.
Average annual growth rate of this city = 87.5%/2008-1990
Average annual growth rate = 87.5%/18 years = 4.86%

ECONOMY

Employment/unemployment rates and other demographic data

- Available through the US Census Bureau and tribal offices

Predominate businesses and industries

- What are the needs of these waste generators?
- What expansion is anticipated?
- Source of revenue to the tribe/community

Specify how some SW activities contribute to the local economy, such as full-time employment and income generated from non-Tribal sources

CLIMATE

Climate/Weather: average seasonal temperatures, wind patterns, precipitation (both rain and snow), storm events (usually in 100 year form) needed to be factored in to solid waste planning

- **Rainfall patterns can effect siting plans for transfer stations and landfills, road access, and moisture content of waste**
- **Wind patterns effect blowing trash, damage facilities, and cause erosion**
- **Plan for 10- or 100-year storm events**
- **Access to transfer stations seriously effected by weather events**
- **www.weather.gov**

GEOGRAPHY AND LAND USE

Geography:

- **Rivers, canyons, washes, vegetation type, elevations and other geographical features all effect solid waste planning**
  - **Using GIS technology, historical maps and aerial photography for planning and management**
  - **Road systems and public access can be effected by geographical features**

GEOGRAPHY AND LAND USE

Land Use:

- **Traditional use**
- **Subsistence Areas**
- **Archeological concerns**
  - Tribal historic preservation office (THPO)
  - State historic preservation office (SHPO)
  - NAGPRA (http://www.nps.gov/history/nagpra/)
  - National Register of Historic Places (http://www.nps.gov/index.htm)

- **Agricultural Concerns**
  - National Agricultural Statistics Service (http://www.nass.usda.gov/)

GEOLOGY AND NATURAL RESOURCES

- **United States Geological Survey (http://www.usgs.gov/)**
- **Natural Resources Conservation Service and state agencies also maintain geologic databases**

Soil types, moisture variations, aquifers, seismic hazards, permeability of rock formations and previous mining activities all effect solid waste planning

- landfill siting (e.g. leachate concerns)
- closure of existing dumps

OTHER CONSIDERATIONS

- List all sources you used to gather information about your community; include names of individuals, agency staff, and reports that you have used or obtained information from for your plan.
- Attach a map of your community or service area
- Refer to your Environmental Inventory (part of your GAP)
- U.S EPA American Indian Environmental Office/American Indian Tribal Portal Maps and Data
  (http://www.epa.gov/tribal/datamaps/index.htm)
- U.S. EPA Databases and Software
  (http://www.epa.gov/epahome/data.html)

Any questions?

SESSION #4:
Program Administration, Partnerships, Laws and Enforcement

PRESENTED BY:

Josh Simmons
Principal Consultant / Attorney / Collaborative Strategist
www.ProsperSustainably.com

April 12, 2016

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Program Administration

- Who is responsible for the following regarding waste program(s)?
  - Decision-Making
  - Program Management (day-to-day)
  - Program Implementation
  - Education & Outreach
  - Administrative & Financial Management
  - Data & Information Management
  - Compliance & Enforcement
- ACTIVITY
  - Answer these questions in your groups
  - Report answers back to class

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Current Program Administration Agencies and Entities

- Describe current responsible agency(ies) and entity(ies)
  - Include a description of the functions of each agency and entity
- This may include one or more of the following:
  - Agencies, Committees, Boards, Utility Authorities, Departments
- Single v. Multiple Responsible Agencies
  - Multiple agencies from same tribe, different tribes, and/or non-tribal govts
- Constitutional v. Non-Constitutional Tribes

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Current Program Administration Position Roles and Responsibilities

- Describe current waste program roles and responsibilities
  - Include a description of the functions of each position
    - Can include / develop job descriptions for waste management personnel
- Decision-Makers – determine laws, policies, strategies, staffing, budget, agreements/contracts, services, major purchases, etc.
  - Tribal Examples: Tribal Council members, Utility/Environmental Board, members, Tribal Administrator, Environmental Director
    - Can involve layers of authority
- Program Management – oversee day-to-day program operations
  - Examples: Environmental Director, Program Managers, Specialists
    - Can involve layers of authority

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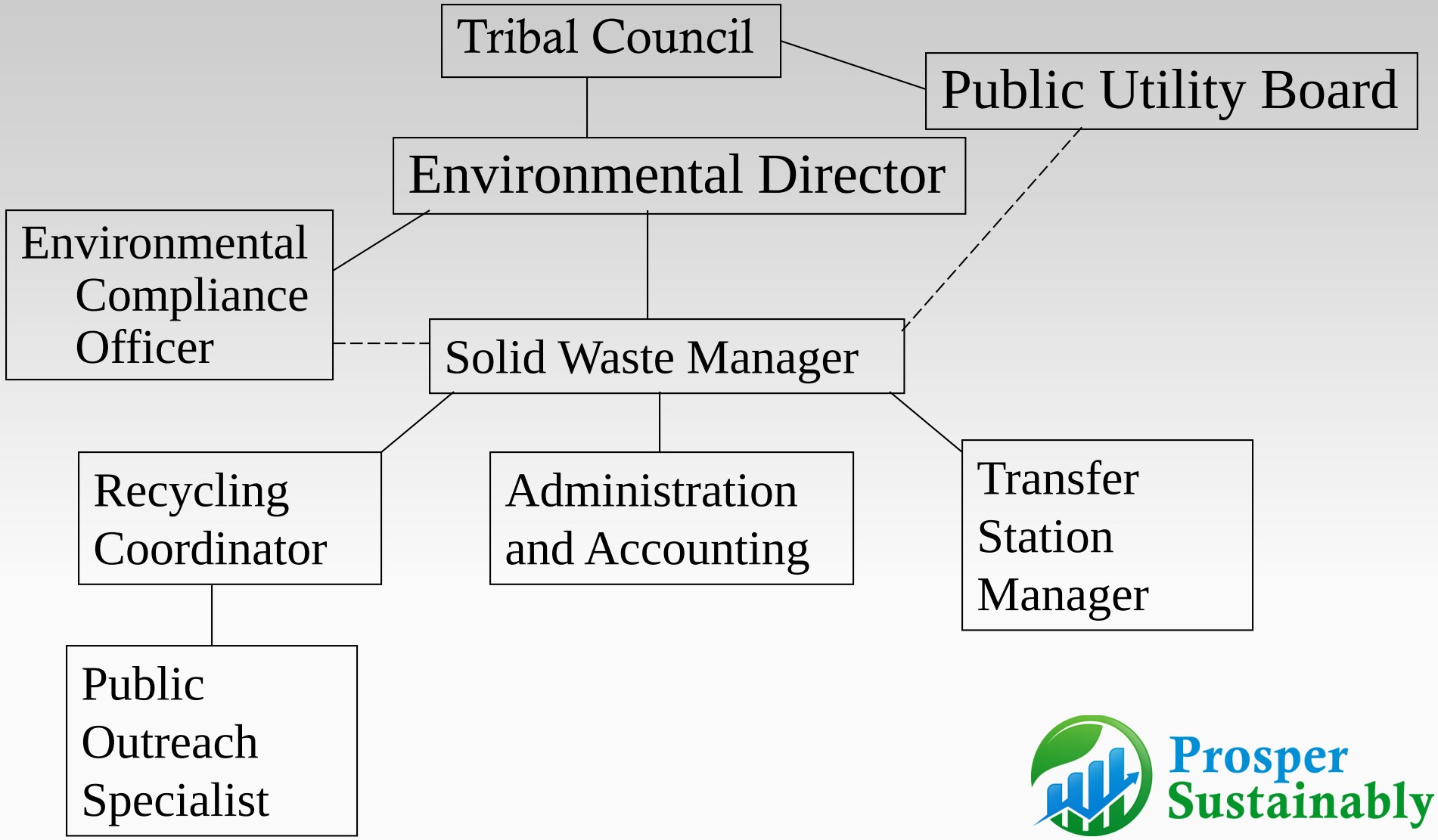
Example Organization Chart



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Current Program Administration Position Roles & Responsibilities

- **Program Implementers – implement daily program operations**
  - Examples: Program Managers, Specialists, Technicians, Operators
- **Education & Outreach – communicates with public**
  - Examples: Program Managers, Specialists, Coordinators
- **Administrative & Financial Management – manages finances, etc.**
  - Examples: Financial Officer, Administrative Assistant
  - Manages costs and revenues, grants, accounting, financial reporting, etc.
- **Data & Information Management**
  - Examples: Program Managers, Specialists, Technicians
- **Compliance & Enforcement of Waste Laws**
  - Examples: Compliance Officer, Law Enforcement, Managers, Specialists

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Current Program Administration

- What are your current waste program gaps, deficiencies, needs?
  - Focus on entities, positions, expertise, training, certification, etc.
- ACTIVITY
  - Answer this question in your groups
  - Report answers back to class
- ISWMP Drafting Recommendation:
  - Draft section focusing on overall program administration
  - Address specific responsibilities under current conditions and practices
- Case Study

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Future Program Administration

- Identify and describe future waste program administration options
  - Options for agency, entity, and position functions and responsibilities
  - Focus on addressing previously identified gaps, needs, and deficiencies
- Select options; Describe how program administration will evolve
  - What will the agency, entity, and position functions and responsibilities look like in the future? How will you get there?
- Prepare after drafting all of the current conditions and practices
  - Include under section focused on waste management options and strategy

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Waste Laws and Enforcement

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Terminology

This is how the following words will be used during this session:

- Law = Code, Ordinance, Statute, Regulation
- Code = A Series of Laws
- Statute / Ordinance = Law Adopted by a Legislative Body
  - E.g. A law adopted by the Tribal Council (if they have that authority)
- Regulation = Rules Adopted Under an Ordinance or Statute
  - Must be consistent with the Ordinance/Statute
  - May cover gaps or provide more detailed requirements

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Federal Waste Laws

- Adopted by Federal Government
- Apply on Tribal Lands
  - May apply differently on than on State or Federal lands
- In general, administered and enforced by Federal agencies (USEPA)
- Enforced in Federal Courts
- Resource Conversation and Recovery Act (RCRA) is primary law
  - RCRA passed by Congress
    - Subtitle C – Hazardous Waste Program
    - Subtitle D – Solid Waste Program
    - Subtitle I – Underground Storage Tank Program
  - RCRA regulations passed by EPA

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RCRA

- Under RCRA, Tribes are defined as "municipalities"
  - No Treatment as State (TAS) authorities available
- Federal Agencies have limited enforcement power
  - Virtually none over solid waste issues
  - May have enforcement authority over hazardous waste issues when they "present an imminent and substantial endangerment to health or the environment"

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Tribal Waste Laws

- Adopted by Tribal Government pursuant to governing document(s)
  - Tribal laws are unique to each Tribe
- Applies to "Indians" on tribal lands w/in Tribe's jurisdiction
  - May also apply to "non-Indians" on lands w/in exterior boundaries
    - See "Montana test" (*Montana v. U.S.*, 450 U.S. 544 (1981))
  - No criminal jurisdiction over non-Indians
- Typically Enforced in "Tribal Court"
  - Alternatively, may be enforced by Tribal Council or General Council
- Many Tribes have waste laws that are not being enforced
- Waste issues can be addressed under other laws
  - E.g. Air Law (open burning); Water Law (runoff)

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Montana Test

A tribe retains inherent sovereignty to regulate:

1. "the activities of nonmembers who enter consensual relationships with the tribe or its members, through commercial dealings, contracts, leases, or other arrangements," and

2. nonmember "conduct . . . that threatens or has some direct effect on the political integrity, the economic security, or the health or welfare of the tribe." 450 U.S. at 565-66.

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State Waste Laws

- Adopted by State Government
- Enforced in State Courts
- Typically do not apply on Tribal Lands
- Exceptions:
  - Congress authorizes (e.g. P.L. 280)
  - Tribal-State agreement
  - Tribal adoption of state laws (adoption by reference)
    - This is technically tribal law

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Compliance & Enforcement

- Tribe is responsible for compliance / enforcement of tribal laws
- EPA is responsible for compliance / enforcement of federal laws
  - Tribe can assume some compliance and enforcement responsibilities
    - Subject to EPA approval; E.g. UST inspections (compliance)
  - Tribes can report violations of Federal environmental laws to the EPA
- Implementation of Tribal Waste Laws
  - Compliance: Inspections, Permitting, Monitoring, etc.
  - Enforcement: Violations, Enforcement Orders, Hearings, Penalties, etc.
  - Consider available and needed personnel, resources, training, etc.
  - Identify enforcement/compliance policies, procedures, and forms

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Current Waste Laws, Enforcement, and Compliance

- Describe current waste laws, enforcement, compliance in ISWMP
  - Tribal, Federal, and State Laws – describe applicability of each
  - Identify gaps, needs, and deficiencies in laws, enforcement, compliance
- Does your tribe have laws that address waste program issues?
  - If you don't know, how can you find out?
- Is your tribe enforcing its waste laws?
  - Which provisions are being enforced and which are not?
  - Who is enforcing them and how? What are the policies and procedures?
  - If you don't know, how can you find out?
- ACTIVITY
  - Answer this question in your groups
  - Report answers back to class

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Future Tribal Waste Laws, Enforcement, and Compliance

- **Identify and describe waste law, enforcement, compliance options**
  - Focus on addressing previously identified gaps, needs, and deficiencies
- **Select options; Describe how regulatory systems will evolve**
  - Waste laws should address issues identified in ISWMP
  - Tribal Law Options
    - Waste Code (broader) v. Ordinance (narrower)
  - Enforcement & Compliance Options
    - Personnel; Funding; Training; Policies, Procedures, and Forms; etc.
- **Prepare after current waste program conditions and practices**
  - Include under section focused on waste management options and strategy

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Tribal Waste Law Development Steps

- Scoping
  - Identify Issues and Objectives to be Addressed
  - Identify and Consider Enforcement Options and Capabilities
  - Consider Available and Needed Tribal Resources
- Review Tribal Constitution and other governing documents
- Research and Review Similar Laws
- Draft or Revise Tribal Environmental Law
- Presentation & Review
  - Including Tribal Council and Legal Review
  - May include public review (notice and comment process)
- Enact Tribal Environmental Law
- Implement Tribal Environmental Law

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Tribal Waste Laws Example & Available Resources

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Thank You!
Questions?

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SESSION 5: Current Waste Management Conditions & Practices

PRESENTED BY:

Josh Simmons

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April 12, 2016

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Current Waste Streams & Generators

- What entities and activities are generating waste in the tribal community?
- What waste streams are being generated in the tribal community?
- ACTIVITY
  - Answer these questions in your groups
  - Report answers back to class

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Types of Generators

- **Residential Buildings, Facilities, and Activities**
  - Homes, Home Improvements, Construction/Development of New Homes
- **Government Buildings, Facilities, and Activities**
  - Offices, Health Clinic, Events, Public Facilities, Transportation
- **Commercial Buildings, Facilities, and Activities**
  - Gas Stations, Casino Resort, Stores, Restaurants, Tourism
- **Industrial Buildings, Facilities, and Activities**
  - Energy Generation, Manufacturing, WWTP, Mining, Materials Processing
- **Agricultural Buildings, Facilities, and Activities**
  - Farming, Ranching

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Non-Hazardous Waste Streams

- Glass
- Metals (aluminum, steel, etc.)
- Hard Plastics
- Soft plastics (e.g. plastic bags)
- Paper and Cardboard
- Corrugated Cardboard
- Styrofoam
- Compostable Food Waste
- Green Waste / Yard Waste
- Used Cooking Oil
- General Refuse
- Bulk Waste
- Reusable Items
- Recyclable Items
- Comingled Recyclables
- Items with Redemption Value

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Special & Hazardous Waste Streams

- Household Hazardous Waste
- Electronics Waste (E-Waste)
- Construction & Demo Debris
- Contaminated C&D Waste
- Junk Automobiles
- Medical & Infectious Waste
  - Including Sharps
- Dead Humans and Animals
- Animal Waste
- Septic and Sewage Sludge
- Universal Waste
- Ash / Hot Ash
- Used Motor Oil
- Industrial Waste
- Agricultural Waste
- RCRA Hazardous Waste
- Non-RCRA Hazardous Waste

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Generation Rates

- Quantifying waste stream generation rates – options?
- Waste Stream Characterization / Assessment
  - Can be conducted in-house or contracted out
  - May be offered by waste services provider(s)
- Obtaining and analyzing waste management bills
- Transportation invoices / data
- Tipping fee receipts / invoices
- Other past records, data, and reports
- Available waste management statistics

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Calculating Generation Rates

EXAMPLES

- **Residential Sector**
  - Amount of waste generated / Number of homes = Generation Rate
  - Amount of waste generated / Number of residents = Generation Rate
- **Office Buildings / Businesses (no or limited onsite customers)**
  - Amount of waste generated / Number of employees = Generation Rate
- **Onsite Service Businesses (e.g. hospitality)**
  - Amount of waste generated / Number of customers = Generation Rate
- **Use a consistent timeframe (e.g. daily, monthly, or annually)**

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Current Waste Management Practices

- How is every identified waste stream being managed?
  - Consider each generator since this may vary from generator to generator
- Waste management practices include generation, storage, collection, disposal, processing, transportation, reuse, recycling, conversion, source reduction, etc.
- ACTIVITY
  - Answer this questions in your groups
  - Report answers back to class

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Current Waste Management Practices

- How is every identified waste stream being managed?
  - Consider each generator since this may vary from generator to generator

- Household Hazardous Waste
- Electronics Waste (E-Waste)
- Construction & Demo Debris
- Contaminated C&D Waste
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- RCRA Hazardous Waste
- Non-RCRA Hazardous Waste

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Current Waste Management Practices

- **How is every identified waste stream being managed?**
  - Consider each generator since this may vary from generator to generator

- Glass
- Metals (aluminum, steel, etc.)
- Hard Plastics
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- Bulk Waste
- Reusable Items
- Recyclable Items
- Comingled Recyclables
- Items with Redemption Value

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Current Waste Management Practices

Describe how each waste stream is being managed from cradle to grave

- Generation
- Storage (onsite, intermediate)
- Collection
- Transportation
- Disposal
- Processing
- Recycling
- Reuse / Repurpose
- Source Reduction
- Waste to Energy
  - Burning, Incineration
- Composting
- Chipping and Shredding
- Facilities and Landfills

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Current Waste Management Practices

- Describe who is managing each waste stream (in addition to how)
  - Tribal Agencies and Staff Members
  - Contractors, Service Providers
  - Non-Tribal Agencies
  - (In addition to how)
    - Practices, Facilities, Equipment, Vehicles, etc.
- Describe where the waste streams are being managed
- Prepare a list of facilities, landfills, and service providers
  - Include contact information, location/distance, hours of operation, website
    - This is useful as an Appendix
- Describe other current partners and resources

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Current Waste Management Practices Illegal Dumps and Uncontrolled Wastes

- Not all waste management practices are legal or desirable
- Dumpsites can be open or closed, legal or illegal
- Open, illegal dumpsites are a common problem for Tribes
- Include inventory and assessments for all dumpsites (if available)
  - If not available, include conducting inventory and assessments in ISWMP
  - Request waste site assessment forms from the EPA
  - To qualify for funding and assistance (if available):
    - Report dumps to EPA and add to IHS database (https://wstars.ihs.gov/)
- Other issues: littering, roadside dumping, open burning, etc.

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Current Waste Management Conditions

- Describe environmental conditions linked to wastes (if applicable)
  - This information can be quantitative or qualitative
  - To the extent that this information is not covered already
- Examples
  - Soil contamination data and analysis
  - Water pollution data and analysis
  - Air quality data and analysis
  - Human health impacts
  - Wildlife and habitat impairments
  - Pictures, complaints, smells

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Current Waste Management Costs, Revenue, and Funding

- How much does the current waste management practices cost?
- Is any revenue being generated? If so, how much?
- How are the waste management practices being funded?
- Are there any concerns regarding costs, revenues, funding?
- ACTIVITY
  - Answer this questions in your groups
  - Report answers back to class

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Current Costs, Revenue, Funding

- **Identify/describe tribal costs for managing each waste stream**
  - Facilities, vehicles, equipment, and supplies
  - Personnel costs – wages, benefits, training
    - Consider all activities: Operations, compliance, enforcement, outreach, oversight, etc.
  - Waste service provider fees (collection, transportation, tipping)
  - Administrative and overhead expenses
- **Identify/describe tribal revenue for managing each waste stream**
  - Taxes or fees collected for services provided (if applicable)
  - Fees or penalties collected for compliance/violations (if applicable)
- **Describe tribal or grant funding sources and amounts**

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Current Costs, Revenue, Funding

- Sources of financial information:
  - Bills, receipts, budgets, financial statements/reports, grant applications, accounting department, fee schedules, waste generation/collection rates
    - Some calculation may be required
- Show monthly or annual financials over the past few years
- Consider current bookkeeping practices

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Current Waste Management Conditions and Practices

FOR EVERY WASTE STREAM:

- Address current waste management practices
  - Include who, where, and how
- Address costs, revenue, and funding
- Identify and describe gaps, limitations, deficiencies, and needs
- Organize these by waste stream and/or generator
  - By generator if same waste stream is managed differently by generators
- This section is one of the most important parts of your ISWMP
  - Need to identify status of program to develop a strategy for moving forward

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Thank You!
Questions?

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SESSION #6: Hands-On Waste Assessment Training Preparation

PRESENTED BY:

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April 12, 2016

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Waste Characterization / Assessment

- Brief Background
- Introductory videos:
  - https://www.youtube.com/watch?v=My694wou914
  - https://www.youtube.com/watch?v=OyICoDPPt58
- Purpose
  - Understand the composition of your waste streams
    - Categorize waste streams; Determine weight and volume
  - Identify opportunities to improve waste management
    - Strategies and practices, enforcement and compliance, education & outreach, etc.
- Limitations
  - Only provides a snapshot unless done regularly
  - Messy!!! May require significant manpower

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Waste Assessment Planning

- **Identify and select waste streams**
  - The waste streams should be carefully considered ahead of time
  - Identify waste management issues and opportunities beforehand
- **Select waste assessment date**
  - Timing is very important; Want to assess the most representative sample
- **Recruit sorting team**
  - Try to recruit volunteers, especially generators and influencers
  - Turn it into an educational activity (communicate issues/opportunities)
- **Identify and secure supplies**
  - Examples Supplies List – Santa Rosa Cahuilla

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Waste Assessment Planning

- Prepare data collection forms
  - These must correspond to target waste stream categories
  - Example – Santa Rosa Cahuilla
- Develop health & safety plan
  - Example – Santa Rosa Cahuilla
- Prepare sorting and data collection steps/protocol
- Inform sorting team of required attire and supplies
  - Provide sufficient advance notice

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Waste Assessment Planning

- **Label and weigh sorting bins / Prepare signage for sort stations**
  - There must be a sorting station / bin for each waste stream
  - Example – Santa Rosa Cahuilla
- **Conduct pre-event walkthrough at sort site**
  - Go through the whole process, step by step
  - Identify and address issues and supply needs
  - This is an essential step; DO NOT SKIP!!!!
- **Conduct pre-assessment orientation and training**
  - Can be done immediately prior to the event
  - Go through waste sort steps, health and safety training
  - Also, use as an educational opportunity

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Waste Assessment Planning

- Setup stations and supplies
  - Better to do before participants arrive
- Perform waste sort
  - Example – Santa Rosa Cahuilla
- Organize and analyze data
  - Calculate total weight and/or volume of each waste stream and all waste
  - Calculate percentage for total for each waste stream
- Incorporate data and analysis into ISWMP
  - Utilize data in evaluating waste management strategies

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Waste Assessment Roles

- Coordinator – arranges and manages event
- Lead Sorter(s) – lead sorting efforts for larger groups
- Sorters – majority of crew that separates and weights waste
- Data Collector(s)
  - One person to read scale; One person to record data (per scale)
- Hazwoper Specialist (40-hour hazwoper trained)
  - Important to include for hazardous waste (unless minimal HHW)
- Health and Safety Specialist
  - Good to have but not absolutely necessary; Try to recruit a first responder

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Waste Sort Steps

- Put on personal protective equipment (PPE)
  - Appropriate clothing, glasses, gloves, hats, and sunblock
- Remove waste from dumpsters and place in a central location
- Open bags and spread out waste
- Sort waste into appropriate bins (at corresponding station)
- Weigh waste bin on scale
- Record weight in appropriate place on data sheet
  - Dump waste back into dumpster
- Cleanup Site

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Potential Hazards

- **Physical hazards**
  - Cuts and punctures; bending and lifting
- **Airborne contaminants**
  - Dust
- **Chemical hazards**
  - HHW, chemical spills and containers
- **Biological hazards**
  - Medical wastes, sharps, bloody objects, pet waste
- **Geographic hazards**
  - Altitude and sun exposure (wear hats and sunblock!!); dehydration
- **If you have physical limitations, see me after class**

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Required PPE & Clothing

PPE = Personal Protective Equipment

- Safety glasses (sunglasses are acceptable)
- Long-sleeved shirt
- Long pants
- Sturdy boots
- Sturdy work gloves
- A change of clothes and shoes (recommended)
  - Bring plastic bag for dirty clothes
- Sun protection (hats and sunblock)

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Thank You!
Questions?

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SESSION 7: Future Waste Management Conditions & Practices

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Long-Terms Goals

- What are the long-term waste management priorities and goals?
  - Long-term goals identified by the tribal community and leadership?
  - Long-term goals identified by the Environmental Department?
  - Long-term goals identified by the stakeholders?
- ACTIVITY
  - Answer these questions in your groups
  - Report answers back to class

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Goals v. Objectives v. Priorities

Long-Term Goals v. Intermediate Objectives/Milestones

- **Goals – A Significant Aim or Desired Result**
  - Doesn't have to be achievable within ISWMP timeframe
  - Examples:
    - Achieve zero waste
    - Operate a financial self-sufficient transfer station
- **Objectives – What Must be Done to Achieve a Goal (progress)**
  - Major Steps / Activities (or sub-goals)
    - A series of smaller steps/activities/tasks may be required to achieve an objective
  - SMART – Specific, Measureable, Achievable, Relevant, Time-based
  - Examples:
    - Prepare a ISWMP; Conduct a transfer station feasibility study; Cleanup/close dumpsites
- **Priorities – Objectives of greater importance**
  - Due to impact, timing, need, goals, direction, etc.

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Sample Long-Term Goals

- Effectively Address Waste Management Gaps
- Evaluate, Optimize, and Maintain Waste Management Systems
- Maintain Financial Stability & Maximize Cost-Effectiveness
- Protect Human Health and the Environment
- Maximize Materials Reduction, Recovery, and Diversion
- Maintain and Increase Employment of Qualified Personnel
- Maximize Community Awareness, Involvement, and Positive Behavior
- Eliminate/prevent illegal dumping throughout and near tribal lands
- Operate financially self-sufficient waste collection and/or disposal services
- Strengthen tribal sovereignty and self-governance
- Effectively regulate solid waste management and issues

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Long-Term Goals & Priorities

- Goals inform waste management priorities
  - Use goals to prioritize which objectives to pursue and when
- Identify and describe long-term waste management goals
  - Include as a separate ISWMP section

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Future Generators, Waste Streams, Generation Rates, and Practices

- How will waste generators change?
- How will the types of waste streams change?
- How will the rates of waste generation change?
  - How can you project these changes?
- ACTIVITY
  - Answer this questions in your groups
  - Report answers back to class

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Future Generators and Waste Streams

- Review existing generators and waste streams
- Will there be any new generators or waste streams?
  - Are any new businesses, developments, or construction projects planned?
    - Ask Tribal leaders; planning, business, and project management personnel
    - Review strategic plans, land use plans, and other planning documents
- Will any existing generators or waste streams cease to exist
  - Are facilities, businesses, buildings, operations, or activities going to be shut down? Do any of these have a clear end of life?
    - Ask Tribal leaders; planning, business, and project management personnel
    - Review strategic plans, land use plans, and other planning documents

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Future Waste Generation Rates

- Will the quantities of waste generated change (per waste stream)?
- Factors to consider:
  - Population growth (or shrinkage)
  - New businesses, construction, development (and/or closures)
  - New residential development (or abandonment)
  - Employee or customer growth (or decline)
- Calculating changes to existing waste streams
  - Examples:
    - Current Residential Generation Rate * (Projected Population / Current Population)
    - Current Service Business Generation Rate * (Projected Guests / Current Guests)

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Future Waste Management Practices Identifying Options

- For each and every waste stream (and generator, if same waste streams are managed differently):
  - Identify / describe feasible options for managing the existing waste stream
    - Feasible means that it can be done and is an option worth considering
    - Be sure to include and consider current practices as an option (business as usual)
  - Identify / describe feasible options for managing new waste streams
- For all other waste management issues (e.g. illegal dumpsites):
  - Identify / describe feasible options for managing the issue
- Address full life cycle of waste stream for each option
  - Source reduction, generation, storage, transportation, processing, conversion, reuse, recycling, disposal, etc.

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Future Waste Management Practices

- What are your options for managing your waste streams?
  - Source reduction, generation, storage, collection, transportation, processing, conversion, reuse, recycling, disposal, etc. (cradle to grave)

- Glass
- Metals (aluminum, steel, etc.)
- Hard Plastics
- Soft plastics (e.g. plastic bags)
- Paper and Cardboard
- Corrugated Cardboard
- Styrofoam
- Compostable Food Waste
- Green Waste / Yard Waste
- Used Cooking Oil
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Future Waste Management Practices

- What are your options for managing your waste streams?
  - Source reduction, generation, storage, collection, transportation, processing, conversion, reuse, recycling, disposal, etc. (cradle to grave)

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- Animal Waste
- Septic and Sewage Sludge
- Universal Waste
- Ash / Hot Ash
- Used Motor Oil
- Industrial Waste
- Agricultural Waste
- RCRA Hazardous Waste
- Non-RCRA Hazardous Waste

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Future Waste Management Practices Identifying Options

- Calculate costs and revenue streams for each option
- Describe funding requirements and sources for each option
- Describe changes to program administration for each option*
- Describe changes to program implementation for each option*
  - Include changes to personnel, service providers, partners, etc.
- Describe regulatory changes for each option*
  - Include changes in laws, compliance, and enforcement
- Describe education & outreach strategies for each option*
- Describe other important changes for each option*

*Only address if applicable

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Future Waste Management Practices Identifying Options

- Projecting costs and revenue projected generation rate changes
  - Projected generation rate * Projected cost (account for likely inflation)
    - Show annual changes
- Calculation potential costs and revenue for new practices
  - This may require preparing a feasibility study or business plan
- Gathering additional information is always an option
  - E.g. composting is an option but need more info → feasibility study

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Future Waste Management Practices Evaluating and Selecting Options

- Evaluate and select best option(s) for each waste stream/issue
  - Consider long-term goals and identified priorities
  - Consider costs, revenue, funding, personnel, etc.
  - Consider potential positive and negative outcomes
- You may want to or need to involve higher level decision-makers
- Multiple options may be selected for a waste stream/issue
  - E.g. Continuing with same practices while conducting a feasibility study
- Selection of options may involve prioritizing
  - Pursuing one option may limit ability to pursue another
  - Consider spreading out timing of selected options
    - Listing out in a draft action plan can be helpful in ordering

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Future Waste Management Practices Evaluating and Selecting Options

EXAMPLE – Residential Waste Management

- Option #1 – Continue offering free dumpsters at central location (utilizing a non-tribal service provider)
- Option #2 – Discontinue dumpsters and offer free curbside collection service (utilizing a non-tribal service provider)
- Option #3 – Discontinue dumpsters and notify residents of curbside collection and self-haul options (at resident's expense)
- Option #4 – Discontinue dumpsters and require participation in curbside collection service (at resident's expense)

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Future Waste Management Practices Evaluating and Selecting Options

EXAMPLE – Compostable Food Waste

- Option #1 – Continue disposing of in dumpsters which is picked up by non-tribal waste services provider and disposed at landfill
- Option #2 – Source separate food waste at tribal offices, purchase small composter to compost onsite, utilize compost as fertilizer
- Option #3 – Purchase separate bin and composter for residential food waste to compost onsite, utilize compost as fertilizer
- Option #4 – Develop and offer tribal residential food waste collection service, purchase composter, compost onsite…

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Future Waste Management Practices Evaluating and Selecting Options

EXAMPLE – Household Hazardous Waste

- Option #1 – Notify residents of free HHW collection events held at nearby transfer stations
- Option #2 – Notify residents of free HHW collection events held at nearby transfer stations AND collect HHW immediately prior to events and transport on behalf of residents
- Option #3 – Accept HHW on an ongoing basis at the Tribal Offices, store in waste collection area, transport HHW to nearby transfer station during free HHW collection events

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Future Waste Management Administration, Laws, Outreach

- Considering including standalone sections summarizing:
  - Future Waste Program Administration
  - Future Waste Laws, Enforcement, and Compliance
  - Future Public Education & Outreach
- This will be helpful if the changes will be significant
  - Otherwise, these can be addressed under future waste management practices focusing on relevant waste streams and issues
    - E.g. if the only regulatory change will be to develop a law and enforcement program addressing open burning, you can choose to just address this under the future waste management practices subsection focused on open burning

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Future Waste Management Practices Funding Options

- **Federal Grants**
  - EPA: GAP Grant (incl. supplemental funding), Hazardous Waste Grant, CWA 319 Grant (link to NPS), Brownfields Grant
  - IHS: Sanitation Deficiency System funding
  - ANA: Environmental Regulatory Enhancement, SEEDS (link to training)
  - USBR, BIA, USDA, FWS, HUD CDBG, DOE
- **Foundation Grants**
  - National Fish & Wildlife Foundation (link to wildlife/habitat)
- **State Grants (varies from state to state)**
- **Tribal Funding – Ongoing General Funds, One-Time Allocations**
- **Program Revenue**
  - Tipping Fees, User Fees, Taxes
  - Application/Permit Fees, Penalties

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Thank You!
Questions?

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INSTITUTE FOR TRIBAL ENVIRONMENTAL PROFESSIONALS
Tribal Waste and Response Assistance Program (TWRAP)

Developing and Implementing a Tribal Integrated Solid Waste Management Plan

April 12-14, 2016
Palm Springs, CA

SESSION 8:

PUBLIC OUTREACH STRATEGIES

Roberta Tohannie, ITEP

OUTREACH PLAN

Demonstrate Need For ISWMP

- To gain support for the plan will require the involvement of the stakeholders, i.e. planning team, community members, etc.
- Understand the role of culture in tribal solid waste management, i.e. legacy of open dumping.
- Consider that solid waste management is distinguished from other environmental/utility media because community behavior and habits are involved.
- Take into account about “education versus enforcement”

OUTREACH PLAN

Demonstrate Need For ISWMP

- Developing solutions to your community's solid waste problems requires public involvement.
- Public education creates community interest in how solid waste management decisions are made. It may have the added benefit of building community support for your program.
- These are important factors considering the uniqueness of tribal communities:
    - People
    - Land
    - Tribal programs
    - Authority

OUTREACH PLAN
Building Support For Your ISWMP

- Well-planned education and outreach activities can help generate understanding and support for waste management issues in your community. For example, they can be used to teach community members how to comply with waste management to the overall benefit of the tribe or community.
- Ineffective or half-hearted public education initiatives may confuse community members, reduce participation, or cause people to ignore it all. Successful approaches must be consistent and ongoing.
- Incorporate culture and traditional values when appropriate. This will help to deliver your messages more effectively and build trust amongst your audience.

OUTREACH PLAN
Establishing Goals

- Identifying specific goals will help you to develop a more focused and effective outreach plan. Choose goals that are achievable given your available resources, timeframes and other constraints.
- Your goals should define your target audience and help you to customize strategies and activities to meet situation-specific needs.
- Expand your efforts to include community members who are respected and will be listened to by other members.
- You also might need to direct your public education efforts to your staff responsible for implementing your program. This will help them to fully understand their role and convey your messages effectively.

OUTREACH PLAN
Establishing Goals

- The next step is to determine the best way to get your message out to your community members. Your messages are likely to have more impact if they are heard more than once.
- Partnerships and outreach activities complement one another and often open the door to new funding opportunities and an expanded resource base.
- Make sure you are realistic in developing your plan and in setting your goals. Be sure to keep in mind your resource constraints or other relevant factors
- Questions To Ask:
  1. What solid waste issues are people in groups identified most concerned about?
  2. To what extent are people already educated about solid waste and other environmental issues?
  3. Are community members responsive to newsletters, public notices, and other outreach methods?

OUTREACH PLAN
Establishing Goals

What Else May You Want To Consider?

- Public education and community outreach programs are never fully completed. Just because you conducted certain activities doesn't mean you are done promoting and educating community members.
- Anticipate that community members will likely have questions about new initiatives and policies that may not be completely addressed during initial public campaigns or outreach activities
- Most new or revised solid waste programs need to go through adjustment processes before they run smoothly. Make certain that your goals anticipate the new structure or revision.
- Establish a budget. For example, realize costs for:
  - Mailing notices, reports, etc.
  - Print jobs
  - Rental fees for meeting spaces or community events
  - Meals or refreshments for meetings or community events

OUTREACH PLAN

Establishing Goals – Timing of ISWMP Development

YEARLY FORECAST - Timelines and Deadlines

- Establish the date of your presentation for community meeting, tribal council, etc.
- Anticipate deadlines for grants and sponsorships
- Decide when to confirm your team and best days to meet
- Schedule follow-up, post activity discussions
- Start early in the process – planning and implementation take time

OUTREACH PLAN
Choose an Outreach Method

- As you are considering the many options for distributing your message, you will need to take your budget, availability of staff, and technical requirements into consideration when deciding on a method.
- Make certain your messages are concise, easy to understand, visual, and clearly visible.
- Consider the following:
  - ✓ Community Surveys
  - ✓ Fact Sheets and Newsletters
  - ✓ Flyers, Posters, Magnets
  - ✓ Signs, Billboards, Community Bulletins
  - ✓ Brochures, leaflets, card inserts
  - ✓ Press Releases and Public Service Announcements
  - ✓ Website, web page, Facebook, and Other Social Media Outlets
  - ✓ Radio, Television, Internet, Interviews

OUTREACH PLAN
Working With Public To Gain Support

Provide "Press Kits" to the public

- To further increase the presence of the Plan, consider providing an outline or vision statement to certain groups who may play a major role in supporting your plan.

Expect The Media To Approach Key Public Officials

- Make sure you keep key officials informed of the status of your Plan as they may be interviewed or expected to provide comments.

Present Technical Information in Understandable Language

- If you do not take the time and effort to present technical information in simple, accessible language, everyday, understandable language it can increase suspicion and could lead to loss of credibility.

OUTREACH PLAN

Working With Public To Gain Support

Do Not Be Afraid To Say "I Don't Know"

- Expect some challenging questions and inform the public you will reply with an answer soon; better to be right than wrong.

Do Not Purposely Give Incorrect Information

- If your audience finds you have been deceitful and dishonest, then you could lose your support; elders do not like to be treated this way.

Determine Meeting Type Or Style

- Workshops vs. Town halls
- Separate meetings with certain groups?

Working With Your Staff

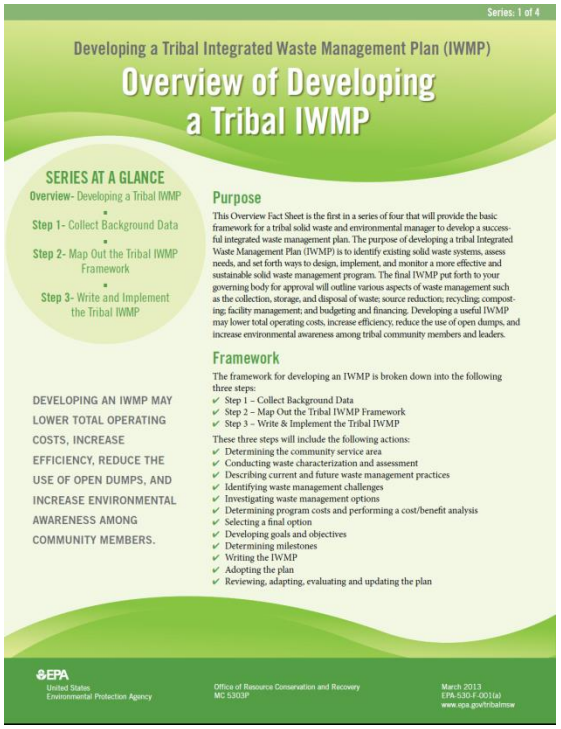
- Make sure your co-workers and volunteers are kept informed of any processes; they are your representatives and contacts; conduct mock meetings and participate in role-play.

OUTREACH PLAN

EPA Resources

EPA Tribal Solid Waste: https://www.epa.gov/tribal-lands

https://www.epa.gov/sites/production/files/2015-10/documents/twj-7_0.pdf



https://www.epa.gov/sites/production/files/2015-10/documents/epa_iwmp_factsheets_final_2.pdf

QUESTIONS?

CREDITS

- **Alaska Native Tribal Health Consortium**
  www.anthc.org
- **Tribal P2 (Pollution Prevention)**
  www.tribalp2.org/
- **National Resource Center**
  www.nationalserviceresources.org/service-activities/tribal-services
- **Agency for Toxic Substances and Disease Registry-Environmental Health Ed for Public**
  www.**atsdr.cdc.gov**
- **Learn and Serve America (AmeriCorps)**
  http://www.learnandserve.gov/for_organizations/indian_communities/index.asp
- **Solid Waste Alaska Network (S.W.AN.)**
  http://www.ccthita-swan.org/main/index.cfm

SESSION 9: Waste Assessment Debrief

PRESENTED BY:

Josh Simmons
Principal Consultant / Attorney / Collaborative Strategist
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April 14, 2016

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Waste Assessment Data Organizing, Integrating, Analyzing

- Calculate subtotals by waste stream and overall total
- Calculate waste stream percentages
  - Waste Stream Subtotal / All Waste Total
- Organize subtotals and overall total in table/spreadsheet
  - Optional – create and insert chart
- Insert table into ISWMP under current waste generation
  - Briefly describe waste characterization event (when, who, what)
- Include data as needed under current waste streams descriptions
- Utilize data to identify/analyze issues, opportunities, and options
  - Practices, laws, enforcement, E&O, administration, etc.

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Waste Data Calculations & Analysis

- **Calculated Material Weight for each load (per waste stream)**
  - Material & Container Weight Combined – Empty Bin Weight
    - CRV Plastic Load #1 Example: 6.8. lbs – 3.6 lbs. = 3.2 lbs.
- **Total Material Weight (per waste stream)**
  - Sum of Calculated Material Weight (all loads per waste stream) = Subtotal
- **Total Material Weight (all waste streams)**
  - Sum Calculated Material Weight Subtotals = Total
- **Waste Stream Percentage (per waste stream)**
  - Subtotal / Overall Total x 100 = Percent of Total
- **Describe two new options/objectives you would consider**
  - If these were the results for your residential waste
  - Relating to practices, laws, E&O, administration, etc.

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Thank You!
Questions?

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SESSION 10: ISWMP Drafting, Finalizing, Implementing, Revising

PRESENTED BY:

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April 14, 2016

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Developing an Action Plan

- Insert selected options for future waste management into a list or table that includes (at minimum):
  - A brief description of the activity
  - The year in which the activity will be completed
  - The tribal person or entity responsible to the activity
- Additional useful information to include (optional) per activity:
  - Outputs, outcomes, and/or deliverables
  - Projected costs and revenue
  - Funding source(s)
  - All individual staff responsibilities and work years
  - GAP Guidance Capacity Indicator numbers

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Developing an Action Plan
Types of Activities to Include

- **Future Waste Management Practices (per waste stream / issue)**
  - Continued activities – where the practice will remain the same
    - E.g. Continuing to use the same waste collector for residential waste
  - New activities – where a new practice is selected
    - E.g. Start collecting food and green waste to convert to compost and mulch
  - Ongoing activities
    - E.g. Operate existing tribal transfer station
- **Future Development / Revision of Waste Laws**
  - E.g. Developing/revising a comprehensive waste ordinance
  - E.g. Developing/revising a law addressing junk automobiles

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Developing an Action Plan
Types of Activities to Include

- **Future Waste Laws Compliance and Enforcement**
  - E.g. Develop or manage an open burning permit program
  - E.g. Conduct enforcement actions for illegal dumping
- **Future Education & Outreach**
  - E.g. Host an annual Earth Day cleanup event
  - E.g. Publish quarterly articles on waste management issues and opportunities for tribal newsletter and website
- **Future Program Administration**
  - E.g. Obtain approval for a new Transfer Station Manager position
  - E.g. Prepare and implement procedures to track and report curbside waste collection fees per customer to Financial Department

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Developing an Action Plan
Types of Activities to Include

- **Gathering additional information**
  - E.g. Preparing a feasibility study
- **Pursuing and securing funding**
  - E.g. Applying for GAP supplemental funding for a waste site cleanup
- **Developing new partnerships; Strengthening existing relationships;**
  - E.g. Partnering with the County on enforcement of waste laws

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Developing an Action Plan

- Add selected options to action plan table, list, or spreadsheet
  - Also add options that haven't been selected but are still being considered
  - State these selected and possible options briefly as objectives
- Determine timeframe of action plan (recommendation 4-5 years)
  - Develop a living and perpetual plan that will always cover next 4-5 years
- Assign a year to each objective (aka selected option)
- For possible objectives, assign "possible" instead of a year
  - The goal is to keep these objectives on your radar (w/o commitment)
  - Consider during review periods for possible ISWMP incorporation

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Developing an Action Plan

- Repeat objective for each and every year that it will occur
  - E.g. Operate tribal transfer station (for 2016, 2017, 2018, 2019…)
- Assign a primary responsibility for each objective
- Add other information to objectives as desired
  - E.g. outputs, outcomes, costs, funding, staff work years
- Review all objectives by year and make adjustments (if needed)
  - Do you have enough time and resources to pursue all objectives?
  - Do you have enough time and resources to pursue additional objectives?
  - This process will help you effectively prioritize over next 4-5 years
- Consider preparing as a stand-alone document

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Utilizing an ISWMP Action Plan

- Communicate waste mgmt strategy w/ leadership & stakeholders
  - For buy-in, support, progress reporting, etc.
- Direct and manage staff, contractors, and other partners
  - Provides clear roadmap and promotes accountability
  - Use in regular meetings to review and evaluate status of objectives
- Prepare annual budgets and grant proposals / work plans
- Evaluate and address new issues, opportunities, circumstances
- Develop and update EPA-Tribal Environmental Plan (ETEP)

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Updating an ISWMP Action Plan

- Review and update your ISWMP regularly (at least annually)
- Delete (or archive) completed objectives from past year
- Push back (or delete) uncompleted objectives from past year
- Consider adding new objectives and re-ordering later objectives
  - In response to new issues, opportunities, circumstances, priorities, goals
    - Later objectives can also be deleted that no longer are appropriate
- Consider integrating "possible" objectives
- Add year to end of plan and remove year that has passed
  - E.g. 2016 – 2020 → 2017 – 2021

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Action Plan Examples

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ETEP Purpose and Goals
2013 GAP Guidance

- Define mutual roles and responsibilities for program implementation
- Establish a joint EPA-tribal planning process to address tribal environmental priorities and ensure federal programs are fully implemented
- Identify tribal plans to manage authorized environmental programs
- Identify need for environmental programs assistance and resources
- Establish intermediate and long-term goals
- Track GAP progress against long-term goals
- Ensure linkage of GAP work plan tasks to long-term goals

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ETEP Purpose and Goals
2013 GAP Guidance

- Improve alignment of GAP work plan activities with long-term goals and priorities
- Better position tribes and EPA to effectively build environmental program capacity through GAP
- Streamlined approach for a long-term planning tool that can be modified as needed
- Intended to be living, usable documents for both tribes and EPA as environmental partners to use in planning and guiding work
- ETEP = Strategic Planning Documents (Strategic Work Plan)

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ETEP Requirements / Format

2013 GAP Guidance

- **Four (4) Required Components:**
  1. Identification of tribal environmental program priorities, including capacity building and program implementation goals
  2. Identification of EPA program priorities and management requirements
  3. Inventory of regulated entities
  4. Identification of mutual roles and responsibilities
- **ETEP development and format options are flexible**
  - Must address four (4) required components
  - Length, level of detail, and format will vary
    - "Maximum flexibility is provided as to how the ETEPs are developed"
- **Timeframe**
  - No more than 5 year timeframe is recommended by EPA
    - 4 year ETEP may be best to align with GAP funding cycles
    - May want to develop a living and continuous 4 year plan
- **ETEPs to be jointly reviewed at least annually and updated as needed**
  - Jointly reviewed by tribe and EPA (don't wait for EPA)

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#1 - Tribal Program Priorities

MAIN ELEMENTS REQUIRED:

1. Short description of priority
   - Recommendation: Use program areas as priorities
2. Tribe's long-term environmental program goals
   - That address or support priority / priority program area
   - GAP Work Plans must be aligned with ETEP-long-term goals
3. Intermediate program development milestones / objectives
   - To be accomplished with ETEP timeframe
4. Tribe's plans to manage authorized environmental programs
   - This means plans to assume authority(ies) to manage EPA regulatory programs
     - E.g. CAA or CWA TAS (each authority must be officially approved by the EPA)
5. Needed Assistance to achieve goals and milestones/objectives
   - E.g. training, technical assistance, EPA direct implementation actions, financial, etc.

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ISWMPs and ETEPs

- GAP funded tribes must have an EPA-Tribal Environmental Plan
  - GAP funding may be limited to ETEP goals and objectives
    - Keep in mind that as a "living" document, these can be changed at any time
- Waste program goals and objectives must be included in ETEP if:
  - Funded by GAP grant or GAP funding will be pursued
  - Good to include if any EPA funding will be sought for waste management
- The goals and objectives of an ISWMP and ETEP should match
  - Make sure these align in their initial development and in updates
  - Can copy and paste these from one document to the other

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Intro, Purpose, Exec Summary

- Begin ISWMP with brief introduction and purpose
  - This introduction and purpose can be combined in one section
  - You may also provide some background information
- Purpose → the reason(s) why the ISWMP was prepared
- An Executive Summary is optional
  - Summarize current practices, long-term goals, and selected objectives
  - Prepare after ISWMP is drafted
- Introduction & Purpose Example - SRBCI

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ISWMP Appendices

EXAMPLES OF OPTIONAL APPENDICES

- Information on Facilities and Waste Service Providers
  - Location, Contact Information, Hours of Operation, Website, etc.
- Examples of Outreach Materials
- Waste Characterization / Assessment Data
- Community Questionnaire / Study Results
- Feasibility Studies / Business Plans
- Fee Schedules
- Internet Resources

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ISWMP Drafting Advice

- Copy and paste language from other documents
  - Prior ISWMPs, Other Tribe and Agency ISWMPs, Other Plans and Docs
  - Find and download example ISWMPs from internet
  - Ask EPA, ITEP, and other tribes for copies of example plans
- Research/draft current practices, laws, administration, E&O, etc.
  - Then research/draft future practices, laws, administration, E&O, etc.
- Don't attempt to draft the perfect ISWMP
  - This is a living plan to be updated regularly
  - There will always be information gaps
- At minimum, prepare sections focused on current practices and future practices for key waste streams and generators
  - Address areas for which you may seek EPA funding
- Circulate and present draft to stakeholders to obtain feedback
  - Incorporate feedback into draft ISWMP
- Stay organized (e.g. use info tracking document)

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ISWMP Approval

- Who approves the ISWMP?
- What is the approval process?
- How long will the approval process take?

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ISWMP Approval

- Identify governing body / person that needs to authorize ISWMP
  - This entity or person must have authority to approve this plan
- Secure necessary signature(s) w/ name(s), title(s), and date
  - A signed resolution may be attached
- Describe the process and requirements for future review, revisions, and approval in the ISWMP
  - This may be the same process or an easier process
  - Include this information in a separate section in your ISWMP

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ISWMP Review and Updates For an Approved Plan

- Review and update full ISWMP at least once every 5 years
  - Repeat all ISWMP development process – revising instead of drafting
  - Re-approval may be required
  - Include brief section explaining review and update process
    - Describe process, timing, responsibilities, etc.
  - Include ISWMP review and update in ISWMP action plan
  - Optional – review and update annually
    - Can be limited to an internal review and update (re-approval may not be necessary)
- Review and update ISWMP action plan at least annually
  - Include ISWMP action plan review and update in ISWMP action plan
  - Optional – review and update

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ISWMP Implementation

- Share and follow the ISWMP Action Plan
  - Make sure that you initially share and review with implementation staff
- Prepare detailed work plans (if needed)
- Identify, pursue, and secure needed resources
- Determine responsibilities
- Set specific deadlines
- Implement objectives
- Regularly review plan to monitor and evaluate progress
  - Meet and review w/ implementation staff; Adjust action plan as needed
- Update plan w/ new/revised objectives and repeat

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Thank You!
Questions?

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