

Inventory Preparation Plan

**International Emissions Inventory Conference
San Antonio Texas, September 28 – 30, 2010**

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Confederated Tribes of the Colville
Reservation**

Tribal Air Quality Programs

Many Duties

- Administration
- Air Monitoring
- CAA/FARR
- EPA Air Pollution Inspector
- Emission Inventory Expert
 - Never

Why Complete an IPP

- Sets Goals and Objectives
- Road Map of How to Conduct EI
- Provides Long-term Guidance
- Makes Writing the EI Report Easier
- Takes the place of QAPP

Importance of EI

- Provides Localized Air Pollution Information
- Meets EPA Region 10 Strategic Plan Goals

IPP Wizard

- Organization of Wizard
 - Categories
 - Panels
- Fill in the Blank
- Many Nuance
- Knowledge of TEISS Important

- I. INTRODUCTION
- II. CONSIDERATIONS
- III. BACKGROUND
 - Summary
 - Reservation Environment
- IV. OVERVIEW
 - Geographic Area
 - Health and Environment
 - Potential Impacts
 - Attainment Status
 - Emission Inventory
- V. EMISSION INVENTORY
 - Use Of EI Data
 - Source Categories
 - Pollutants & Time Period
- VI. INVENTORY RESOURCE
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 - Estimation
 - Collection Methods
 - Roles And Responsibilities
 - Resources For Conducting EI
 - Data Management
- VII. QA/QC
 - Key Personnel
 - Data Quality Objectives
 - Procedures
- VIII. DOCUMENTATION AND PRESENTATION
 - Documentation
 - Presentation

IPP - BACKGROUND

Navigation: Summary

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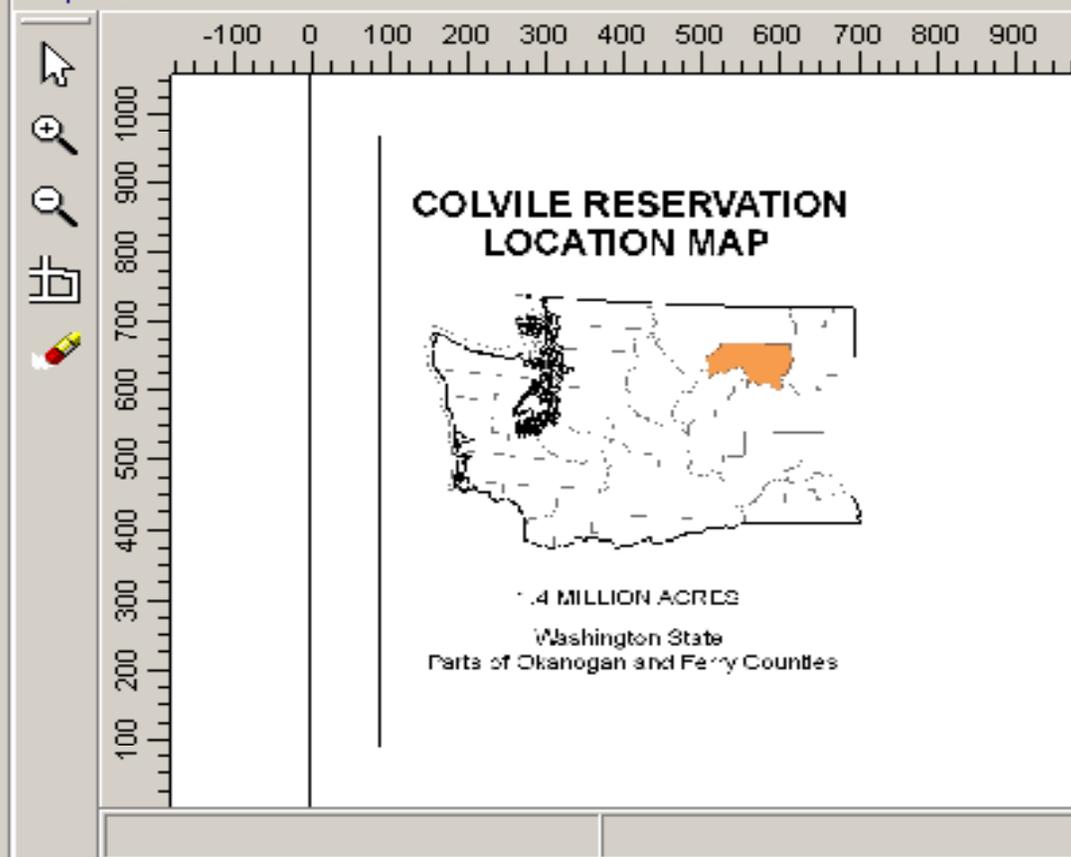


ABC

Summary

Reservation Environment

Map View



Summary Data

Provide background summary information on your tribe:

Population:

7587

Land Base:

1.4E+06

Acres

Clear Map

Import Map...

Tip



To complete your summary, the inclusion of a map of your reservation is ideal. If one is available, you can import one in the Map View section on the left.

Help

Report...

Cancel

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Save and Exit

IPP - BACKGROUND

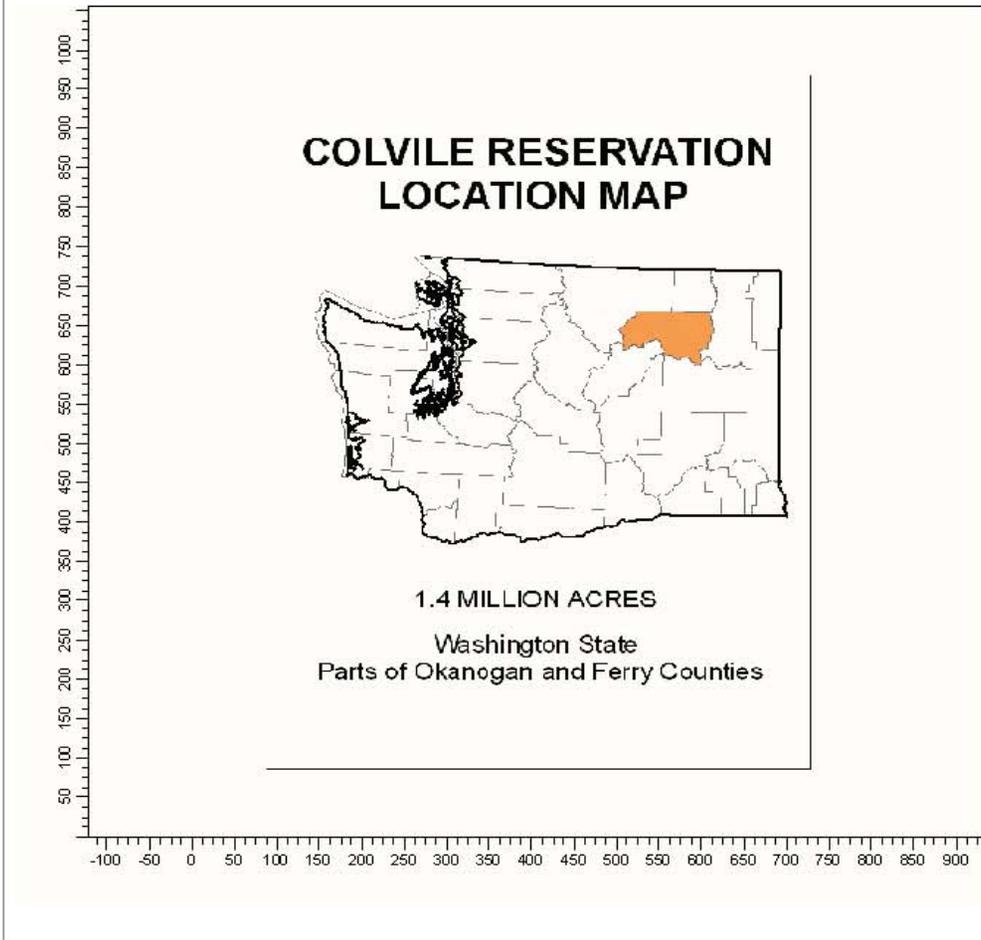


Summary

Population: 7587

Land Base: 1400000.00 Acres

Location Map



IPP - BACKGROUND



Reservation Environment

Environment Description:

The Colville Indian Reservation is located in northeastern Washington and is just under 1.4 million acres in size. The Reservation is bounded on the east and south by the Columbia River, on the west by the Okanogan River and on the north by the line separating townships 34 and 35 of the Willamette Meridian. Elevations range from 790 feet to 6,774 feet and average about 3,000 feet across the Reservation. Precipitation varies from 10 to 25 inches annually and falls mostly in the winter. The major land uses include agriculture, commercial forest, rangeland and residential. The Colville Indian Reservation is home to the Lakes, Colville, San Poil, Nespelem, Southern Okanogan, Moses/Columbia, Palus, Nez Perce, Methow, Chelan, Entiat and Wenatchi bands. The reservation is occupied by 7,587 residents (2000 census), about 5,000 are Colville tribal members (61%) and their families and the rest are non-Colville members, living either in small communities or in rural settings. The east half of the Reservation lies within Ferry County, the west half within Okanogan County. This is a population density of 3.5 people per square mile. Okanogan County has a population density of 7.6 people per square mile and Ferry county 3.4 people per square mile. Major employers on the Reservation are Tribal, County, State and Federal governments, retail, forest industries and agriculture. The Reservation is comprised of lands in both fee (20%) and trust (80%) status.

IPP - OVERVIEW

Navigation: Geographic Area

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Geographic Area | Health and Environment | Potential Impacts | Attainment Status | Emission Inventory

Geographic Area Description

Describe the geographic area to be included in your inventory:

The exterior boundary of the Colville Reservation includes portions of two counties, Okanogan and Ferry. Okanogan County consists of 5,281 square miles of which 1,094 square miles or 21 percent are within the Reservation. Ferry County consists of 2,204 square miles with 50 percent or 1,094 square miles are on the Reservation.

Most of the Colville Indian Reservation is located within the physiographic province known as the Okanogan Highlands. The Columbia River, where the Highlands province merges with the terrain of the Columbia Plateau, generally marks the southern boundary of the province. The southwest portion of the Reservation, however, lies within the Columbia Plateau known locally as the Okanogan Plateau or Timentwa Flats. The eastern boundary of the Highlands province is also marked by the Columbia River (where the river flows to the south), which separated the Highlands from the Kootenay Arc province. The Okanogan River forms the western boundary and separates the Highlands province (locally the Columbia Plateau Province) from the Okanogan Trench province.

Tip



Will you collect information only on sources located within the boundaries of your reservation or within the exterior boundaries of your reservation? If you plan to collect information on sources outside of your reservation (for example, within five miles of your boundaries) where will you obtain emission rates for these outside sources? Click Help for an example.

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IPP - EMISSION INVENTORY

Navigation: Use Of EI Data

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ABC

Use Of EI Data

Source Categories

Pollutants & Time Period

End Use of EI Data

Define the end use of EI data by checking the applicable option. Further details or other end uses can be discussed in the Comments section below.

- Collecting baseline data on air pollution sources to help with air quality planning on your reservation
- Expecting any new sources of air pollution to be constructed on your reservation in the future
- Showing trends in air quality
- Use your EI to support a Tribal Implementation Plan
- Use your EI to participate in Regional Planning Organization's efforts to protect visibility
- Use your EI to assess the need for a tribal permitting program
- Conducting the EI to fulfill the requirements of your grant
- Other

Comments

The Air Resource program of the Environmental Trust Department will utilize the EI to assess the amount of emissions from several categories of sources located in various regions of the Reservation and then determine strategies for reducing emissions from sources having adverse impacts when appropriate. It will also supplement data from monitoring efforts for a better understanding of air quality trends and concern. By conducting successive EIs over a long period of time trends can be established on the number of sources and the quantity of emissions. EI information will be instrumental when developing strategies for reducing emissions and adverse impacts, such as through a Tribal Implementation Plan. The EPA and Colville Tribes have given the EI process a high priority by making it a task in the current and future work plans. The First EI will be a Level IV effort with subsequent inventories moving into the Level III quality. Level IV inventories are usually compiled from previously published emissions data, and are not intended to directly support rulemaking or compliance activities. A Level IV inventory on the Colville Reservation will provide the base line information for decisions on work plan development, trend analysis and risk evaluation to Reservation

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IPP - EMISSION INVENTORY



End Use of EI Data

Applicable Options:

- Collecting baseline data on air pollution sources to help with air quality planning on your reservation
- Expecting any new sources of air pollution to be constructed on your reservation in the future
- Showing trends in air quality
- Use your EI to support a Tribal Implementation Plan
- Use your EI to participate in Regional Planning Organization's efforts to protect visibility
- Use your EI to assess the need for a tribal permitting program
- Conducting the EI to fulfill the requirements of your grant
- Other

Comments

Further details or other end uses:

The Air Resource program of the Environmental Trust Department will utilize the EI to monitor sites and help plan for future work and monitoring efforts on the Reservation. By conducting successive EIs over a long period of time trends can be established on the number of sources and the quantity of emissions. EI information will be instrumental when developing a Tribal Implementation Plan by providing baseline data. The EPA and Colville Tribes have given the EI process a high priority by making it a task in the current and future work plans. The First EI will be a Level IV effort with subsequent inventories moving into the Level III quality. Level IV inventories are usually compiled from previously published emissions data, and are not intended to directly support rulemaking or compliance activities. Level IV inventories include pure research and development projects, greenhouse gas inventories, and voluntary internal compliance audits. A Level IV inventory on the Colville Reservation will provide the base line information for decision on work plan development, trend analysis and risk to Reservation residents. Level III inventories are based on site-specific data and do not directly support rulemaking activities. The results of a Level III inventory may guide future research efforts. Examples include Superfund Amendments and Reauthorization Act (SARA) 313 inventories. A Level III inventory for the Colville Reservation will support monitoring efforts by identifying potential areas of concern and sources to monitor. The level IV EI acts as the baseline and will be completed in phases with the first accounting for point and Federal Air Rule for Reservation (FARR) registered sources. In phase 2 non-point, road and non-road data will be added. This first effort (phase 1 and 2) will encompass only the Reservation. Phase 3 will include areas outside the exterior boundaries including the Okanogan Valley, North Half, Lake Roosevelt and south into Grant and Douglas Counties. Phase 3 will only be accomplished if sufficient time, resources and information exists. Accomplishing the EI in phases allows the allotment of the work load over the entire year in an organized fashion. On a broader scale of uses the EPA Region 10 Air Tribal Strategic Plan 2009 states the following: Regional Tribal Emissions Inventory for Indian Country in Idaho, Oregon, and Washington - Region 10 would use TEISS to access and review emissions inventory information entered by Tribes; supplement TEISS with any additional existing information EPA already has (see Levels 1 and 2 below); reconcile any differences between the information the Tribes have entered and the information EPA has; in coordination with Tribes, collect area source information (see Level 3 below); and update TEISS with the new information obtained. EPA would collect, estimate, and enter information for criteria pollutants and air toxics. EPA would estimate Greenhouse Gas (GHG) emissions for the sources listed below if TEISS is updated to include GHG emissions (this update has been proposed but not funded yet). Level 1 Major stationary sources: Ensure all data for major Title V sources is entered into TEISS. Level 2 Registered sources: Ensure all data for sources that have registered under the FARR is entered into TEISS. Level 3 Significant area sources: Collect data for the most significant area sources and enter it into TEISS. We would initially focus on woodstoves, open burning (including agricultural and forestry burning), gas stations, and auto body shops. The EI data collected will also be included in a national effort. The emission inventory for the Reservation will be submitted to the National Emissions Inventory System as stated in the Air Resource Programs FY 2010 work plan. The Technology Transfer Network Clearinghouse for Inventories

IPP - INVENTORY RESOURCE



Navigation: Existing Data

VI (1 of 6)



Existing Data

Estimation

Collection Methods

Roles And Responsibilities

Resources For Conducting EI

Data Management

Data Description

Specify the availability and usefulness of existing data.

The two Title V facilities, CIPV and CIPP are required by the CAA part 71 and FARR to report emissions and submit a Fee Calculation worksheet each year by October 31.

CIPV documents include: Air Pollution Control Title V Permit to Operate R10T5-WVA-03-01M1, May 24, 2005; Statement of Basis for Modified Permit No. R10T5-WVA-03-01M1; Non-Title V Air Quality Operating Permit R10NT500500; and Colville Indian Plywood and Veneer's Part 71 annual fees and Emission Reporting for Calendar Year 2007. Similar documents will be used if available for 2008.

CIPP documents include: Colville Indian Precision Pine Annual FARR Registration Supplemental Information, November 2008; CIPP Fee Calculation Worksheet, 11-2-08; Title V Permit Application. Information from similar documents will be used to gather the 2008 data.

Sources that emit more than two tons per year, yet do not qualify as Title V facility with 100 tons per year need to

Tip



Example: Tribal EI completed in 1998, data is outdated, but will serve as a starting point for current EI.

Example: Queried the EPA's NEI for sources near reservation. Does not include any on-reservation sources, but will include closest off-reservation sources in current EI to assess their impact on reservation air quality.

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Codes Used

- Facility Input
 - Reservation
 - Primary SIC
 - Primary NAICS
 - Facility Class
 - CERR
 - Dun & Bradstreet Number

Codes Used

- Emission Unit Input
 - SIC Unit Level

- Process Input
 - SCC Codes

Navigation: Key Personnel

VII (1 of 3)



ABC

Key Personnel | Data Quality Objectives | Procedures

Specify a QA Coordinator

Name: Kris Ray

Organization: CCT Environmental Trus

E-mail: kris.ray@colvilletribes.c

Telephone: 509-634-2418

Tip



This may be the same as the project manager/air quality specialist who is conducting the emissions inventory.

Specify a Technical Reviewer

Name: Bill Todd

Organization: EPA Region 10

E-mail: Todd.Bill@epamail.epa.c

Telephone: 206 553 6914

Tip



It is important to find at least one other person to review your methods, calculations, and final report.

Comments

Contact information for other personnel identified under the Roles and Responsibilities section:

Gary Passmore, 509-634-2426, gary.passmore@colvilletribes.com

Justin Spenillo, 206-553-6125, spenillo.justin@epa.gov

Christopher Hall, 206-553-0521, hall.chris@epa.gov

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Two Part DQO

- What are the major sources of air pollution and associated emission levels within the outside boundaries of the Reservation?
- What are the appropriate reduction strategies to develop and implement to address the sources?

Navigation: Documentation

VIII (1 of 2)



ABC

Documentation | Presentation

El Documentation

Describe how you will document your completed emission inventory.

- Written report with tables, graphs, QA/QC, data, calculations, and other information.
- Plan to archive supporting data, such as original copies of completed surveys.
- A database or spreadsheet containing data and/or calculations.
- Other

Comments

A final report will be prepared showing the EI process and results using narrative, graphic and photographic documentation. The report will be available in paper and as electronic media. All documentation will be submitted to Justin Spenillo, EPA Project Officer, Office of Air Waste and Toxics as a product of the 2010 work plan covered under CAA 105 Grant A-96081301-1.

Help

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**Air Emissions Inventory
Criteria Pollutants
For the
Confederated Tribes of the Colville Reservation
Washington State
Base Year 2008**

**Prepared by
Kris Ray
Air Resource Program
Environmental Trust Department
Confederated Tribes of the Colville Reservation**

August 11, 2010