



Windsor Solutions, Inc.

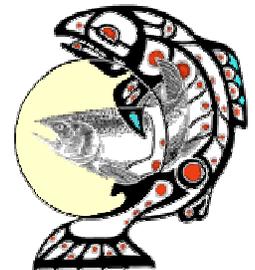
Implementing WQX for a Tribe

STORET/WQX Users Conference

Wednesday, November 28, 2007



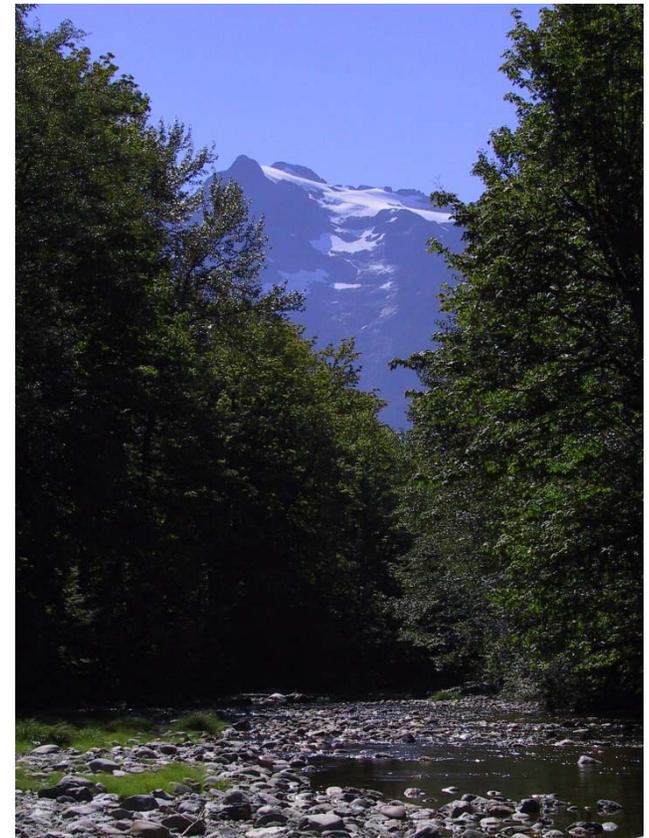
Environmental + Health
Information Systems



Introduction

What do we hope you take away from this presentation?

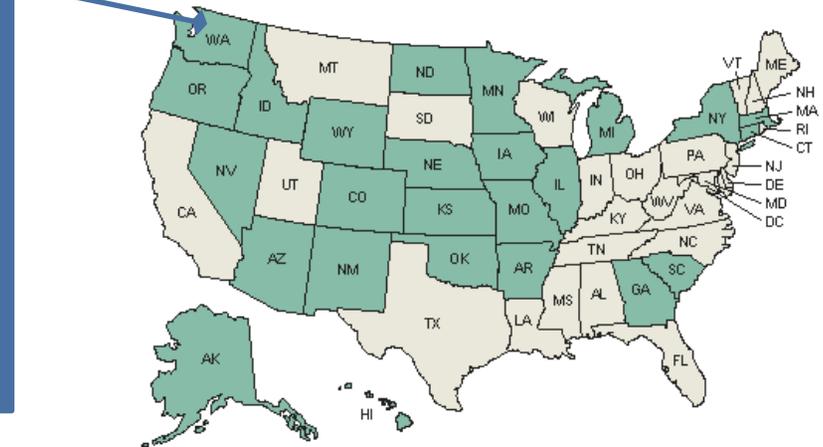
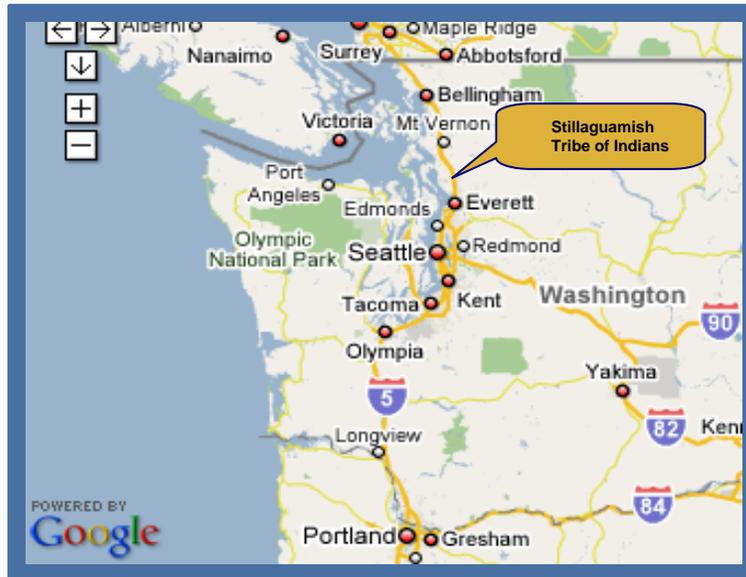
- **Introduction to the Tribe**
- **Background and challenges**
- **Overview of the solution**
- **Findings from the implementation**
 - **Roles and responsibilities**
 - **Flow idiosyncrasies**
 - **Monitoring and troubleshooting**
- **Ongoing maintenance requirements**



Project Overview

Stillaguamish Tribe

“To manage, protect, and conserve those natural resources that are required to sustain healthy populations of fish, shellfish, and wildlife within the Stillaguamish Watershed”

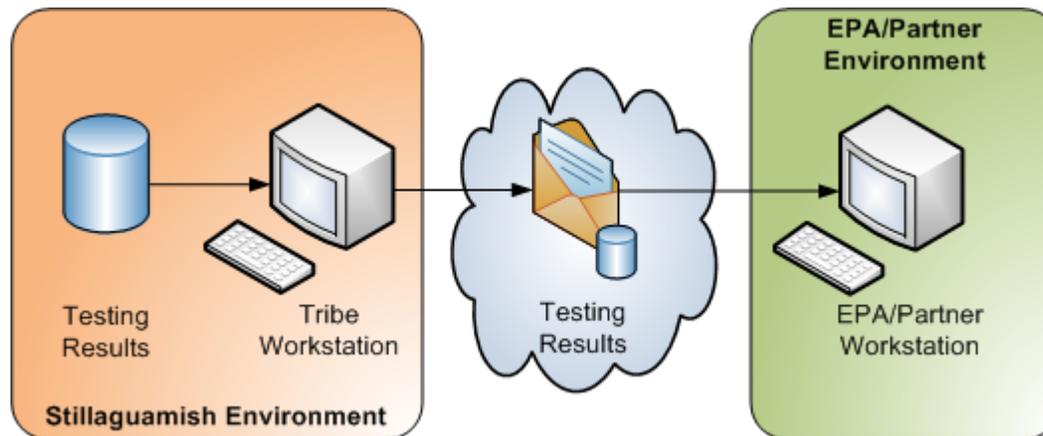


Project Overview

Tribe's Challenges

What challenges triggered the need for a solution?

- **Manual processes**
- **Large datasets**
- **Inconsistent data structure/format**



Project Overview

Project Description

What did we do?

- **Implemented and configured the Windsor Network Node**
- **Developed a WQX data flow component with one simple service**
- **Implemented and configured the WQX data flow component**
- **Tested the WQX data flow**
- **Deployed the data flow component to Production**

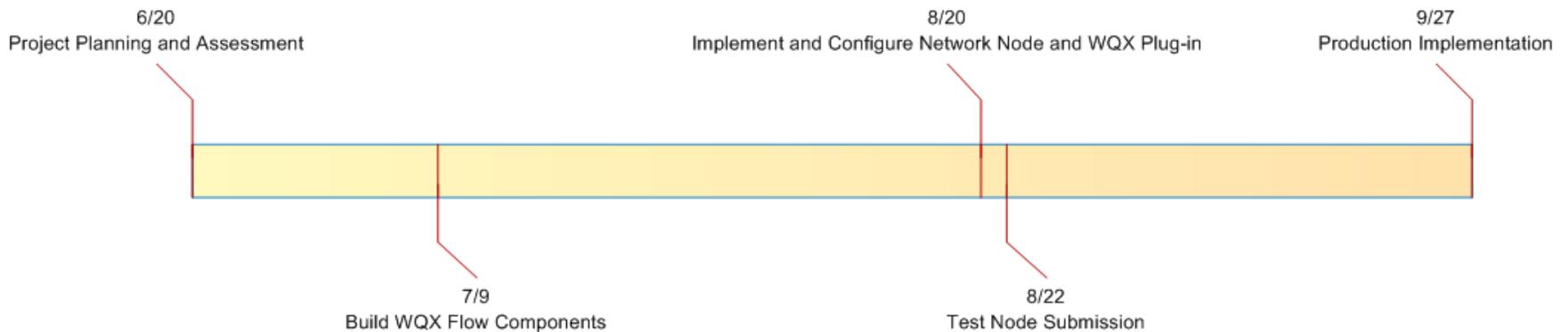


Project Overview

Project Timeline

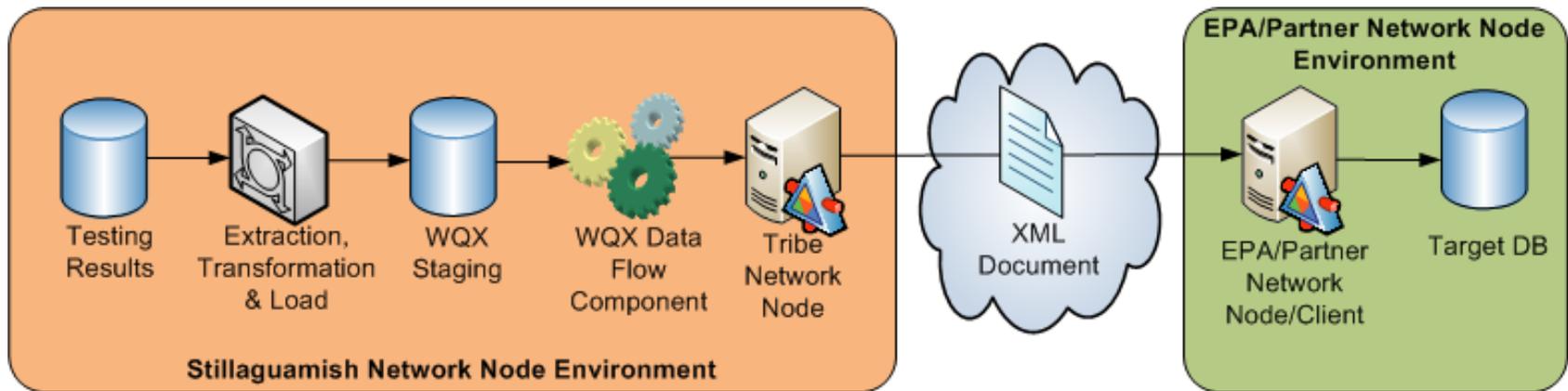
How long did it take?

- **3 1/2 months in duration**
- **Utilized proven, structured project approach**



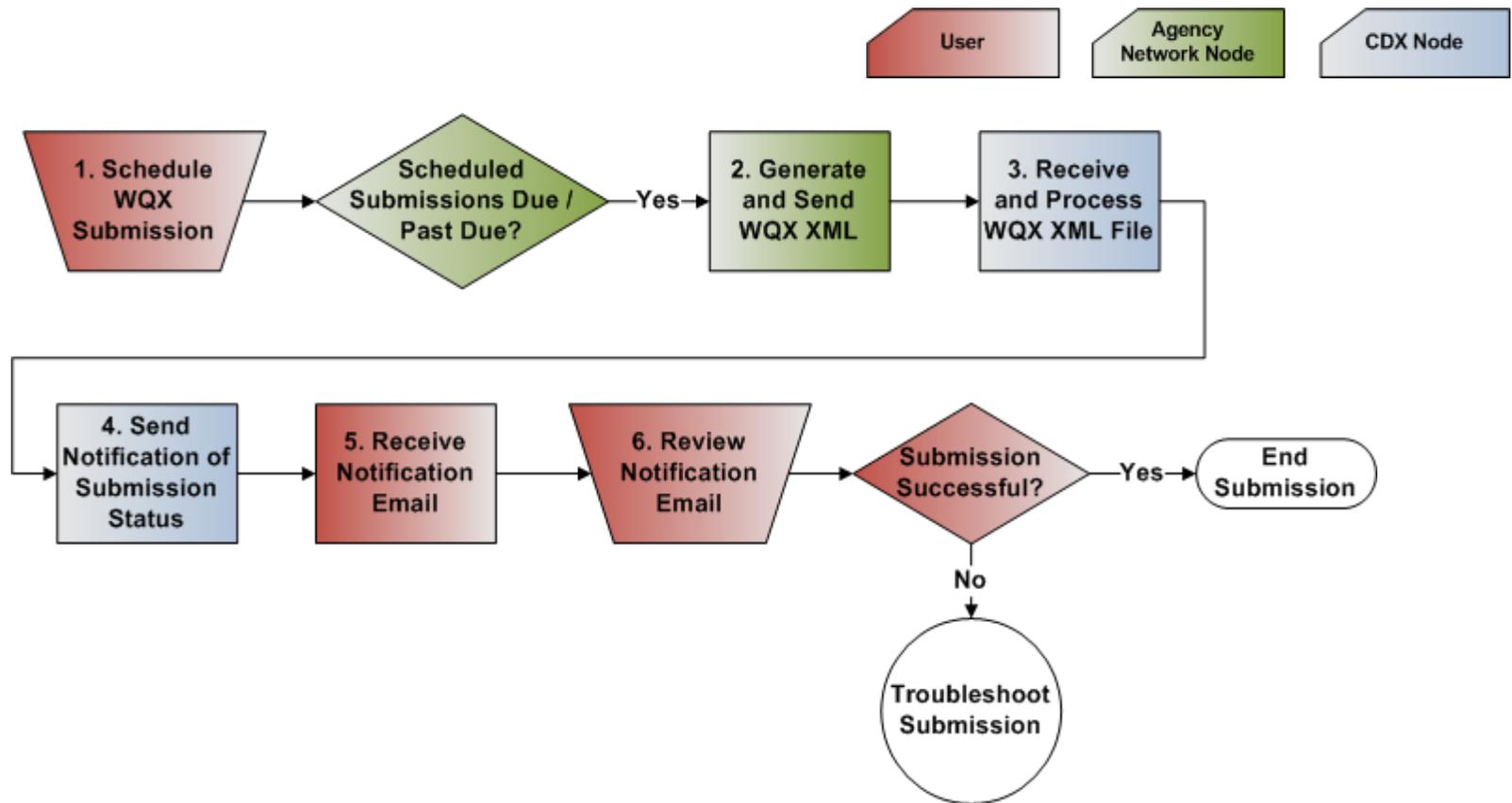
Solution Technical Architecture

How does it work?



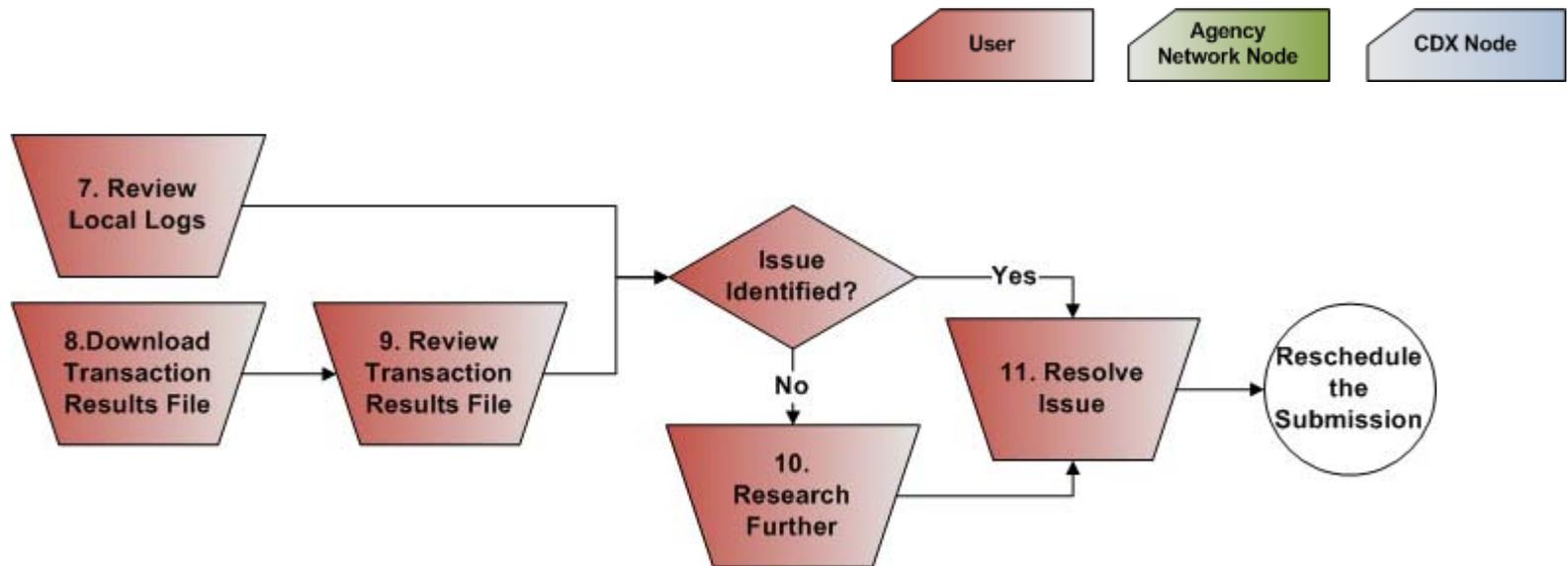
Solution

Scheduling a Submission



Solution

Troubleshooting a Submission



Project Results

What were the results of the effort?

- **Automated process to exchange information with partners**
- **Data exchanged among partners in a consistent structure/format**
- **Ability to support additional data flows in the future**



Flow Implementation



Flow Implementation Implementation Challenges

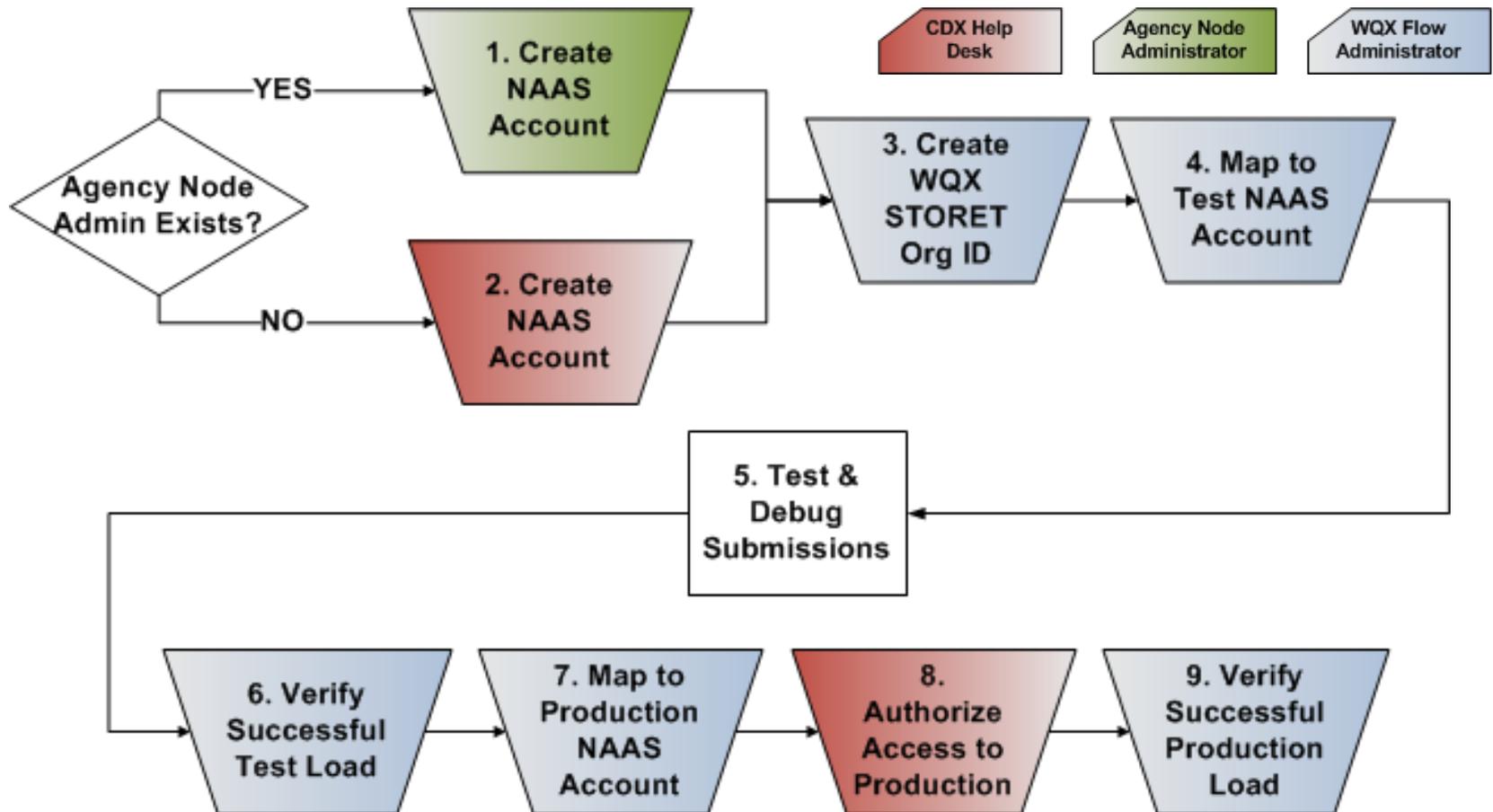
What were the specific challenges?

- **Environment preparation**
- **Data preparation**
- **Connection issues**
- **Testing**
- **Technical Considerations**



Flow Implementation

Administrative Roles and Responsibilities



Flow Implementation Status Monitoring

How to monitor status?

- Local logs
- Online test monitoring
- Downloadable transaction results



U.S. Environmental Protection Agency

GetStatus Result

User ID: eric@windsorsolutions.com
Node Address: http://test.apacdxnode.net/cdx/services/NetworkNodePortType_V10
GetStatus has been performed on the Node. The results are as follows:

GetStatus Summary	
Security Token:	csmjB8a5ev_AKPa2qlA2EawrsZv3ZMVBNNHbpioZYVqgSUBGyPY3zr4nNgr2FkCJ.kuKFFS8K7vJgEnL_q0I4g...
Transaction ID:	2593b4fd-e9b6-4c07-8e39-2e8dfe3a0d31
Received Response:	COMPLETED
Request SOAP:	Download
Response SOAP:	Download

```
NodeAdmin Log Entry Report
*****
Log Entry Id: 6d0fa8fd-0f3d-406f-9ed2-61dc1deaaeal
Created On: 11/1/2007 2:01:28 AM
Created By: jdrots@stillaguamish.nm.us
Primitive: Schedule
Transaction ID: 30915b85-8e90-4059-aa8a-d1e3d42dcc32
Requestor's IP: 172.0.0.1
Service: GetDataByChangeDate
Data Flow Name: WQM
```

```
Entry Detail:
Remote Transaction ID: a398881-72c7-4ed3-b146-7f552a143421
```

```
Account = jdrots@stillaguamish.nm.us
Service = GetDataByChangeDate
Parameters = 1980-01-01
ReturnUrl =
https://cdxnode.epa.gov/cdx/services/NetworkNodePortType_V10
TransactionID = 30915b85-8e90-4059-aa8a-d1e3d42dcc32
FlowName = WQM
Status = Completed
OtherMessages = Scheduled job WQM Monthly Upload was processed at: 11/1/2007 2:01:27 AM (Total Processing Time: 1.45 min.)
CreatedOn = 11/1/2007 2:01:27 AM
```



Flow Implementation

Interpreting Feedback

How to interpret results?

- **Two basic types of errors – transmission & data**
- **Errors are not as intimidating as they may appear**
- **Many errors can often be traced to issues in the source data**

0okm9ljn8uhb77yg6tfvc5rdx4nsz1qaswvex2wsd
c3edfa4rg56tghl6yh7uoiuyt3458uhdf7yh23450ool
k098g\][poi52w2WFG@#\$\$%^&_JHA67Y2u7987345
Invalid County Code
35'lnky;lkjfght932i9cvt970n4vy][6b\b67pq5y6783
2xn9oec34-0v4,r6b=C-
5b=0buon0=tyj'';457k;l'd645k;l46e5';



Post Implementation Ongoing Efforts

What happens next?

- **Monitor Process**
- **Manage Source System Adjustments**
- **Renew Secure Sockets Layer (SSL) Certificate**
- **Plan for Future Data Flows**



Summary

What should be taken away from the presentation?

- **Overview of the Stillaguamish Tribe's WQX implementation**
- **Administrative steps to implement the flow**
- **Monitoring and troubleshooting the implementation**
- **Familiarity with the flow idiosyncrasies**
- **Ongoing maintenance that will be required for Network Node and WQX data flow**



Questions and Answers

