

# eBEACHES Data Flows

EN2014

2014 Exchange Network National Meeting  
Philadelphia, PA

Presented

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by

Bill Kramer, CEP, PM  
U.S. EPA, Office of Water  
Kramer.bill@epa.gov  
202-566-0385



# Snapshot of EPA's BEACH Program

- **Program Goal:** Reduce risk of infection to users of our nation's recreational waters through improvements in recreational water programs, communication, and scientific advances.
- **Objectives -- Use BEACH Act and other actions to:**
  - #1 Support and Strengthen Management of State and Local Beach Programs**
    - **Program Grants**
    - **Guidance/ Performance Criteria**
      - Beach Location & Classification Data
      - Monitoring Data
      - Public Notification & Risk Communication Data
  - #2 Improve Science that Supports Recreational Water Monitoring Programs**
    - Research to improve: Water Quality Indicators; Modeling and Monitoring; Knowledge of Exposure and Health Effects, Rapid Methods Usability



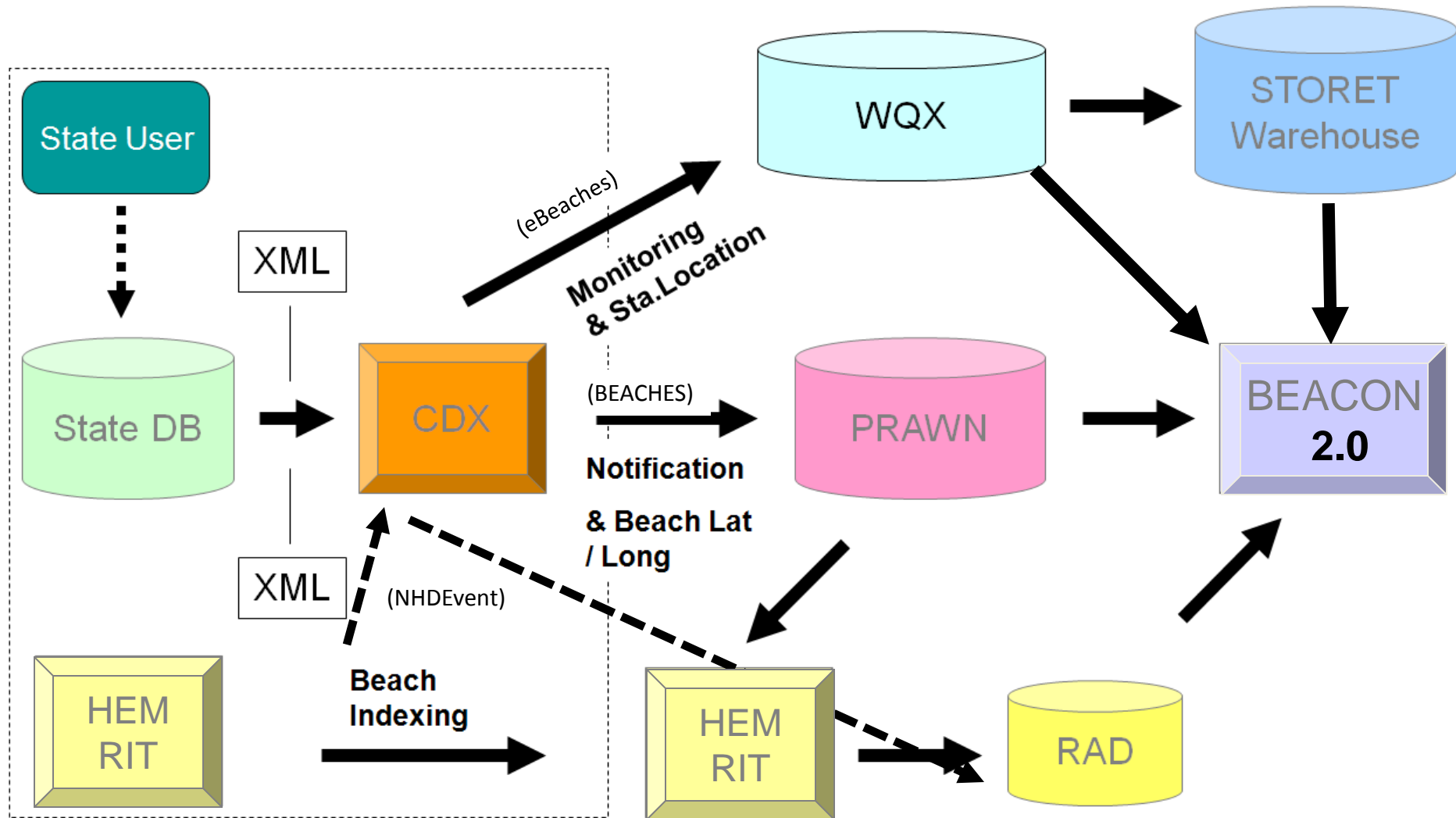
# 3 Data Flows

## eBeaches System

- **Location data** (mapped; indexed to NHD/RAD flow lines via NHDEvent flow)
  - Beach location ( L/L of end points [-> line] PRAWN)
  - Monitoring station (L/L of point from WQX/STORET)
- **Monitoring results** (surface water quality via eBeaches flow)
  - Pathogens (and other , e.g. algae, salinity)
- **Notification data** (advisory or closure via BEACHES flow)
  - When, how long, cause, possible pollution sources
  - May be triggered by monitoring or “policy” / “model”
- Prior year’s swim season data **due to EPA by January 31**
- Annual dataset posted **on EPA website after verification** with jurisdictions



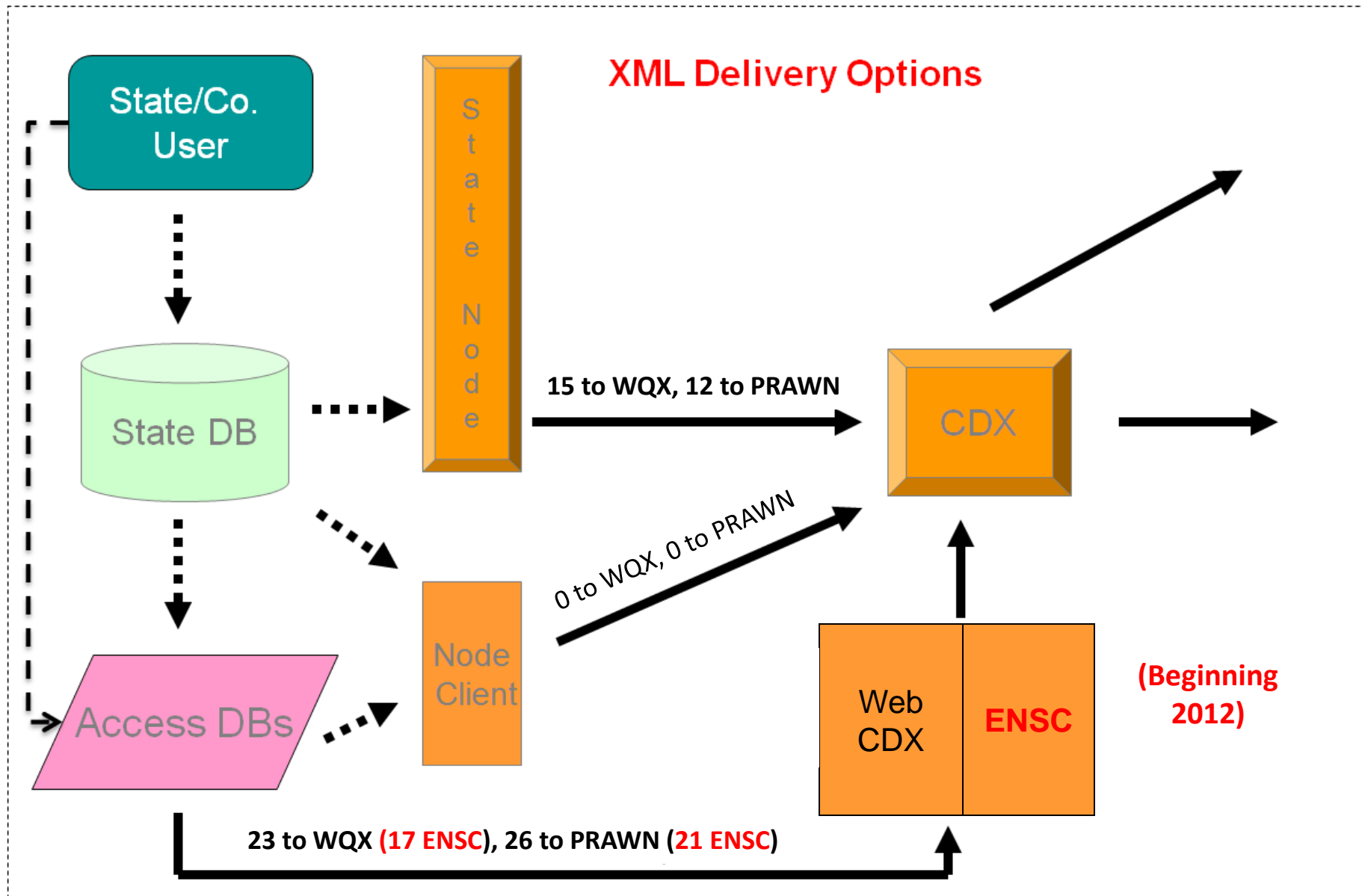
# eBeaches Data Flow





# 2013 Season eBeaches Data Flows

## 38 Jurisdictions





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## Services Directory ?

[Add this page to My Quick Links](#)

This directory uses the Exchange Network Discovery Service (ENDS). For the BETA version, the Services Directory contains only services that support Submit and Download operations. Select the name of the Service you wish to use.

Filter By:

Keyword(s) ▼

Enter Keywords

Filter

Clear

1 - 20 of 25

&lt; Previous 1 2 Next &gt;

<u>Service Transaction</u>	<u>Dataflow</u>	<u>Service Name</u>	<u>Service Description</u>	<u>Node</u>	<u>Service Provider</u>
<a href="#">Send Info</a>	AQS	AQS Submit	Air Quality System Document Submissions	NGNProd2.0	U.S. Environmental Protection Agency
<a href="#">Send Info</a>	BEACHES	BEACHES Submit	BEACHES Submit: Send notification data files to the eBeaches system (BEACHES)	CDXProd2.0	U.S. Environmental Protection Agency
<a href="#">Send Info</a>	Chesapeake Bay Program Regional Exchange for BMPs	GetBMPFullRefresh	GetBMPFullRefresh	Virginia DEQ Test Node	VA Department of Environmental Quality
<a href="#">Send Info</a>	eBeaches	eBeaches Submit	eBeaches Submit: Send monitoring data files to the eBeaches system (eBeaches)	NGNProd2.0 (new 2013)	U.S. Environmental Protection Agency



# Beach Program Credentials SOP

## A. Group STORET: [STORET@epa.gov](mailto:STORET@epa.gov)

Please register the **NAAS ID** in WQX and map the NAAS ID to the appropriate **ORG\_IDs** for Test and Production – for use by CDXweb; and send that information to the nodehelpdesk.

(NOTE: WQX also creates WQXweb User IDs (firstnamelastname) for WQXWeb users only. WQX Web is the WQX/STORET version of CDX Web and is generally not involved in the Beaches registration process. Beaches and STORET are two separate programs with separate applications in CDX. Beaches users register in CDX Web while STORET users register with WQX Web. It is possible that one user could have two separate user IDs, one for CDX Web and the other for WQX Web. For WQX Web we always use the firstnamelastname for new user registration.)

## B. CDX web Helpdesk [helpdesk@epacdx.net](mailto:helpdesk@epacdx.net)

1. Please assist the user in creating the CDXweb accounts and passwords for both TEST and PROD, and assign the following roles for:  
CDXweb  
eBeaches: Notification  
eBeaches: Monitoring (New for submitting to WQX)
2. Use the table of registrant info (incl. **TSMSS**) to create a Customer Retrieval key (CRK) and notify the new user of their CDXweb CRK #.

## C. Node Helpdesk [nodehelpdesk@epacdx.net](mailto:nodehelpdesk@epacdx.net)

1. Please assist in creating the test and prod NAAS user accounts for **ENSC** access; and send the user their NAAS user id and separately their password.
2. Map the test and prod NAAS user accounts to the user test and prod CDXweb accounts and grant the necessary permission policies to the user NAAS accounts.  
ENSC  
eBeaches: Monitoring to WQX  
BEACHES: Notification to PRAWN

## D. Beaches Submitter Applicant

1. Please contact the CDX helpdesk in reference to the CRK and they will create the test and production accounts for monitoring and notification in **CDXweb** for you to be able to receive transaction emails.
2. After creating the test and prod CDXweb accounts, please contact the node helpdesk for them to map the Naas accounts to the CDXweb accounts.
3. Please use the attached table of submission addresses to make test and prod submissions.

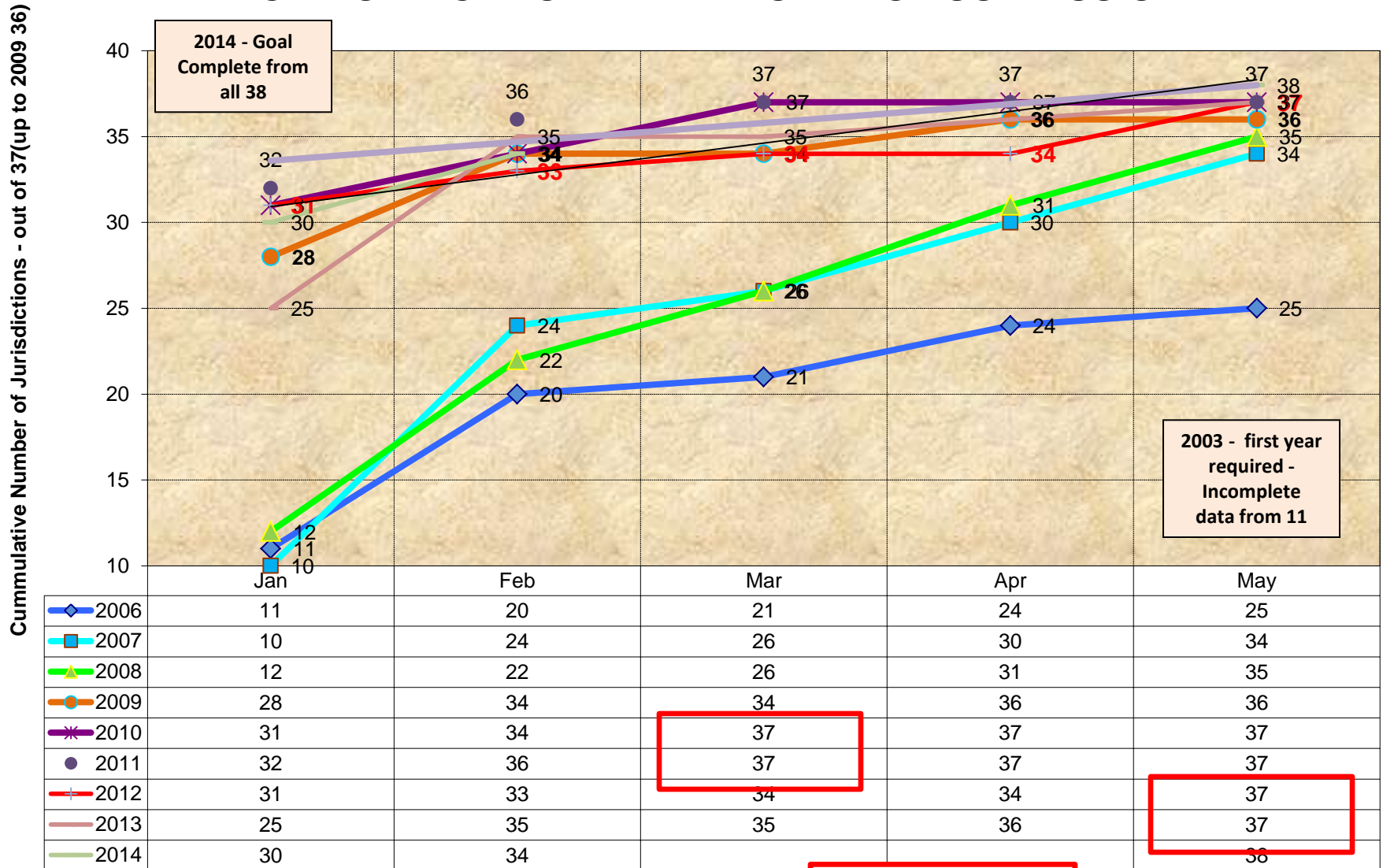
## Link to additional data flow addresses

<http://www.exchangenetwork.net/epa-node-endpoints/>



# QUANTITY AND TIMELINESS

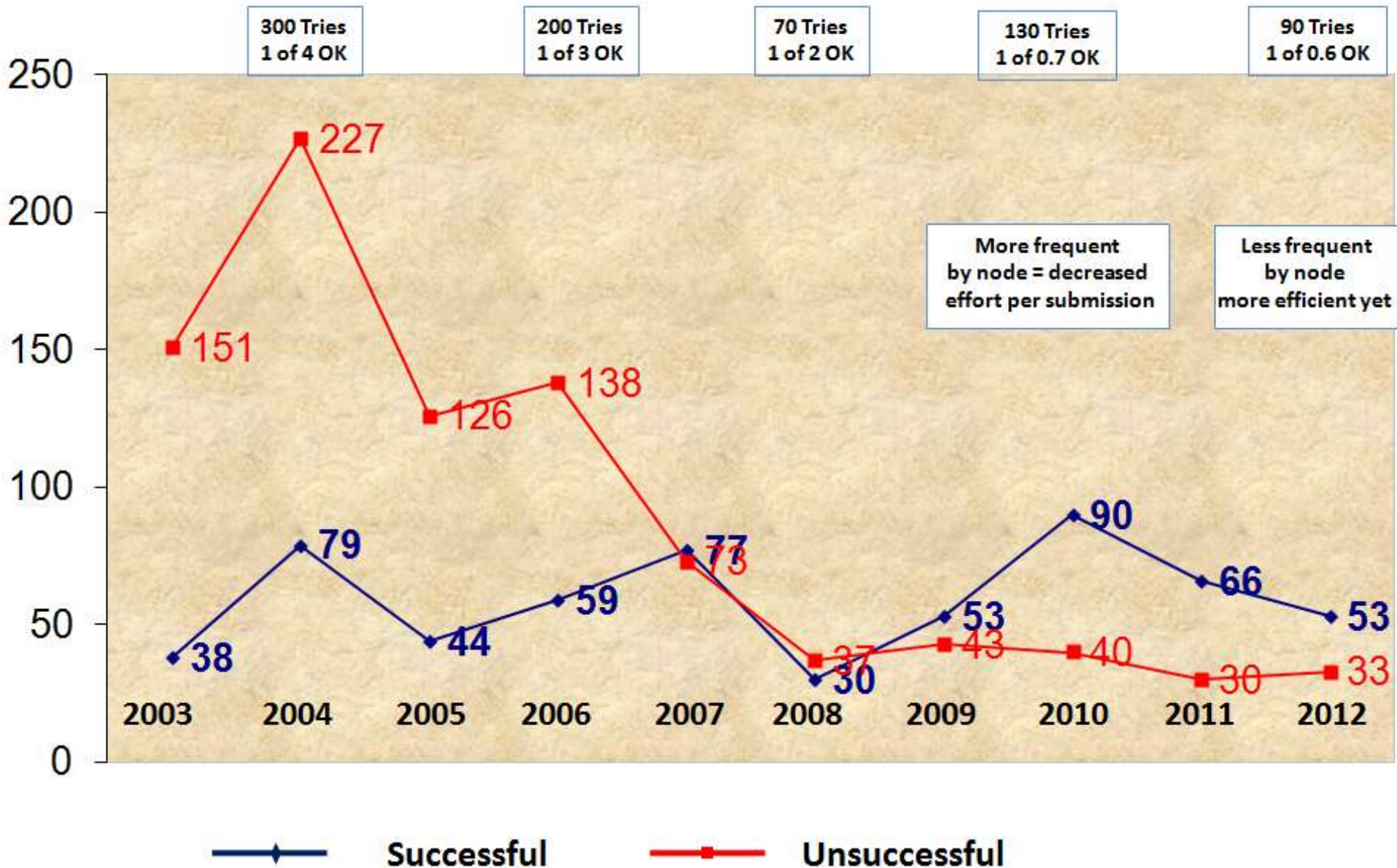
## BEACH NOTIFICATION DATA - MONTH OF SUBMISSION



Last coming later



# Swimming Season Notification Submissions





# Where We Are Going (2014)

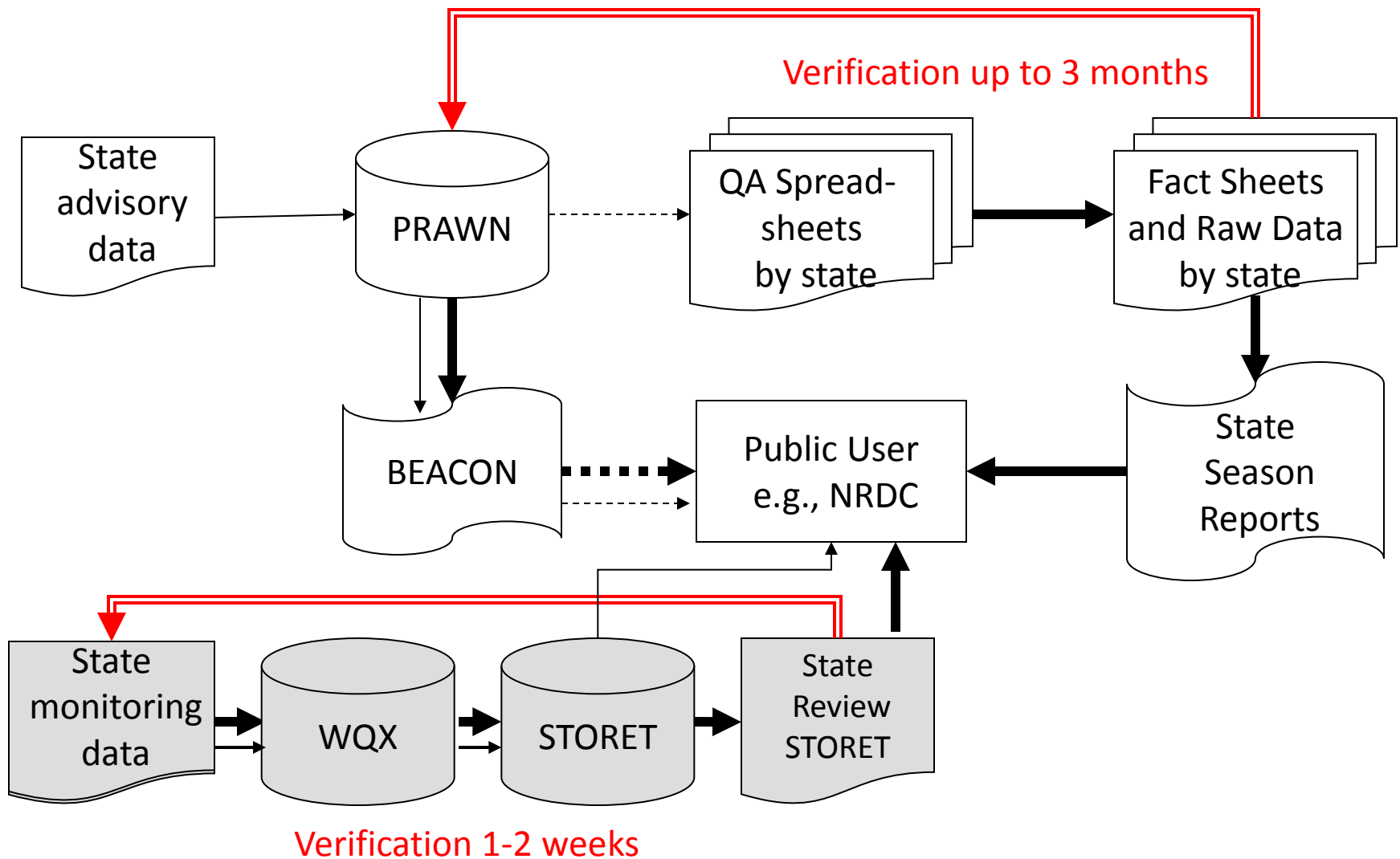
*A Great Lakes Restoration Initiative Project*

- More useful and appealing EPA webpage
- Increased analytical capability at beach and aggregate levels; e.g., trends, exceedances, advisories and closures, pollution sources
- Less effort for states to submit and approve data (small enhancements, more guidance and training)
- More timely information to the public (e.g., annual to weekly/daily)
- ~~Real-time quality assurance tool~~



# Flows of State Beach Monitoring and Advisory Data

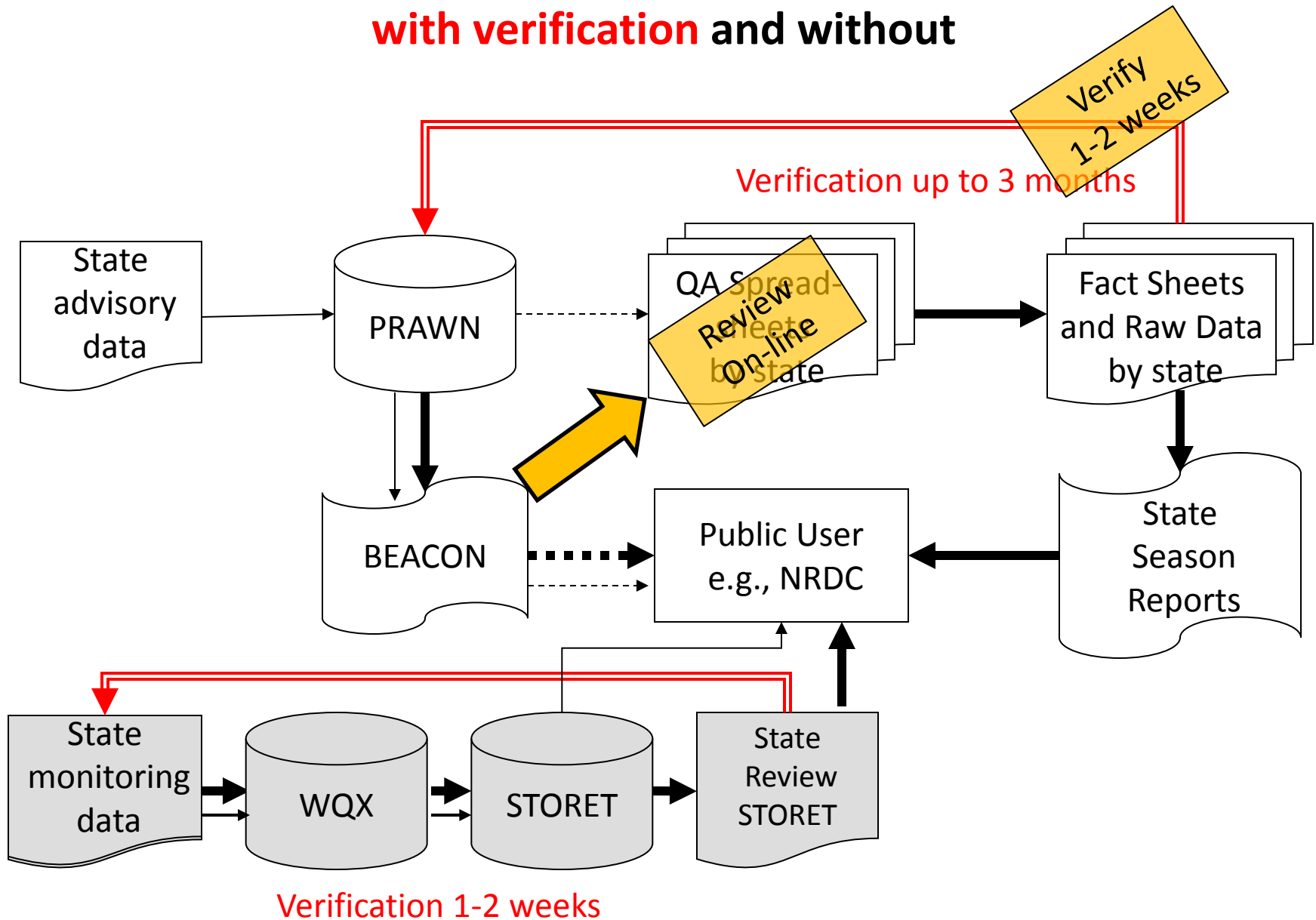
## with verification and without





# Flows of State Beach Monitoring and Advisory Data

## with verification and without





<http://watersgeo.epa.gov/beacon2/>

## Find a Beach

[BEACON 2.0 User's Guide \(PDF\)](#) (53 pp, 1.8MB, [About PDF](#))

[About Beacon](#)
[Find a Beach](#)
[Reports](#)
[RSS Generator](#)

Go To: Address or Location ▼ Type state, zip, or address Go

 Back
  U.S. View
 Forward 

Latitude: 36.2404 Longitude: -41.0342

**Streets**   **Imagery**   **Topography**   ☒ Automatic basemap selection enabled



**Note:** Mapping is still in process for the following jurisdictions: GU, CNMI, AS.



# BEACON 2.0 – Beach Advisory and Closing On-line Notification

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You are here: [EPA Home](#) » [Beaches](#) » [BEACON 2.0](#) » Find a Beach

## Find a Beach

BEACON 2.0 User's Guide (PDF) (53 pp, 1.8MB, About PDF)

About Beacon Find a Beach Reports RSS Generator

Go To: Address or Location Type state, zip, or address Go

Back U.S. View Forward

Latitude: 34.6703 Longitude: -76.2793



Ocean-side beach approximately 2 miles north of Cape Lookout Ferry

Beach ID:	NC106127
County:	CARTERET
Advisories and Monitoring Data	No advisory or closure
Date:	Jan 18, 2012
Beach Advisory and Closing Information	
Water Quality	
Beach Profile	
Contact Information	
Additional Reports	
Zoom to Beach	

Streets Imagery Topography Automatic basemap selection enabled

bing

Legend

5 km

4 mi

Alaska, Hawaii, US Territories, and Tribes

For additional maps of Office of Water program data, see the [EPA My WATERS Mapper page](#).

Note: Mapping is still in process for the following jurisdictions: GU, CNMI, AS.



# Reports

- Standard and Custom
  - filter by: where, when, content; select, sequence columns
- Single beach
- **Multiple beaches** and jurisdictions e.g.:
  - ▶ EPA Region, GL, LIS, CB, GOM, nationwide
- Variable timeframes
- **Multiple and single data type reports**
  - ▶ Recent monitoring and advisory data
  - ▶ Location, monitoring, advisory/closures
- Downloadable, create stored re-query (RSS)



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**QUESTIONS ?**

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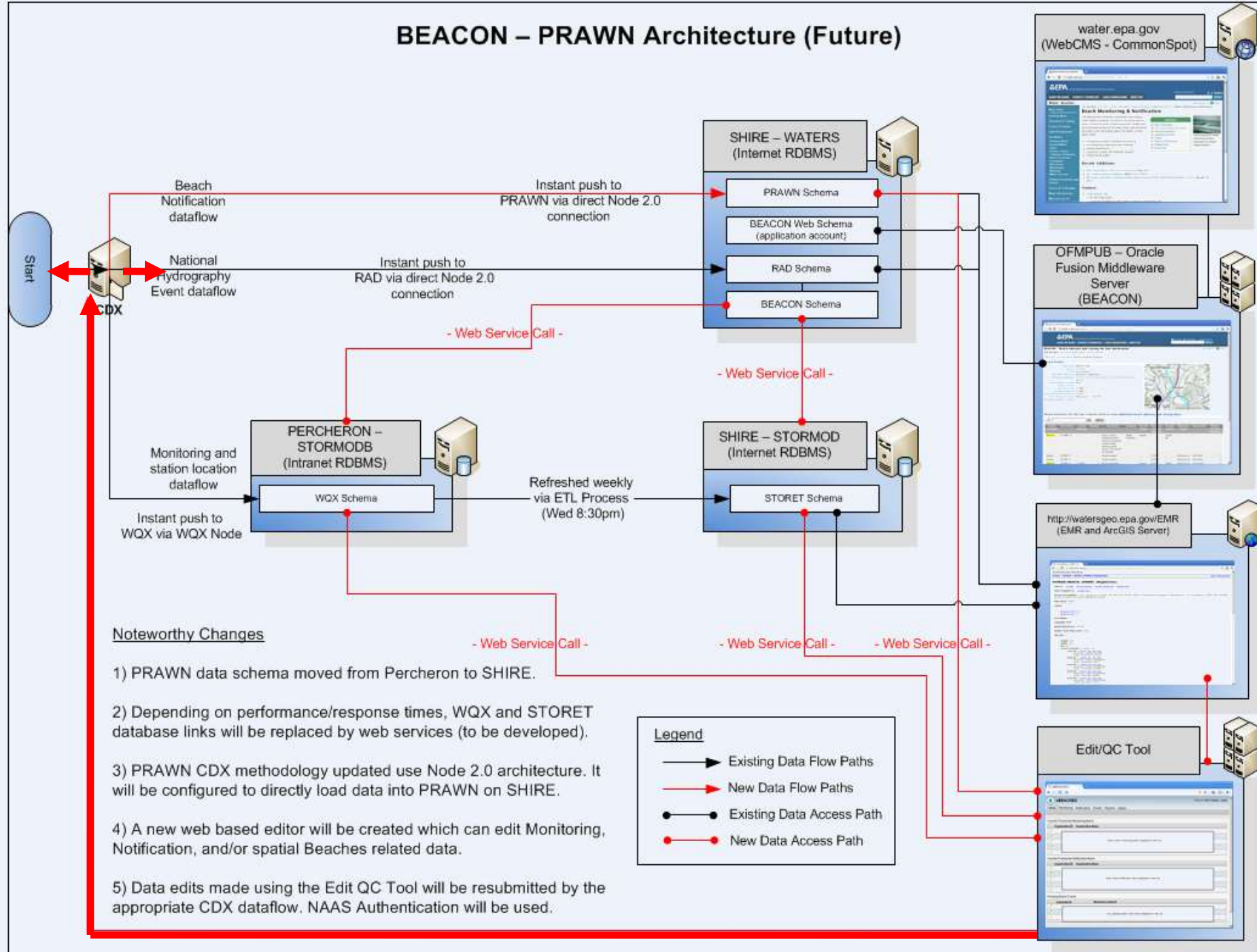
# Validation Session Files to Jurisdiction

## Tool prompts data owner to:

- A. Download report **from BEACON webpage**, edit DB of record, resubmit to CDX. (or)
- B. Tell Verification Tool to **send file to owner** only, owner edit DB of record, resubmit to CDX. (or)
- C. (If node exists) [Tool opens EN Services], execute **send to jurisdiction node** (Node then parses into DB of record) then resubmit to CDX via node. (or)
- D. B-C (w/o resubmit), **AND** Tool resubmits to CDX.



# BEACON – PRAWN Architecture (Future)



## Noteworthy Changes

- 1) PRAWN data schema moved from Percheron to SHIRE.
- 2) Depending on performance/response times, WQX and STORET database links will be replaced by web services (to be developed).
- 3) PRAWN CDX methodology updated use Node 2.0 architecture. It will be configured to directly load data into PRAWN on SHIRE.
- 4) A new web based editor will be created which can edit Monitoring, Notification, and/or spatial Beaches related data.
- 5) Data edits made using the Edit QC Tool will be resubmitted by the appropriate CDX dataflow. NAAS Authentication will be used.