

# Beach Notification Data Beach Data User Guide for Notification Schema v2.0

Version: 2.0

Revision Date: 11/2007

i

#### Acknowledgments

The Beach Notification Data User Guide for v2.0 by CGI Federal.

The principal author of the original version is Charles Kovatch within the Office of Water. Mike Klos and Andrew Hampton of CGI Federal made further revisions to keep the document updated.

#### Introduction

This document is an update of the previously-released "Beach Notification Data User Guide for v1.2, August 2006". Specifically, it describes, in detail, what data is required by the EPA for a BEACHES notification submission, how to construct a notification submission, and the specific meaning behind each of the fields in the notification submission.

#### What's new in version 2.0, November 2007

- 1. New namespace for XML files: xmlns:bch="http://www.exchangenetwork.net/schema/BEACHES/2"
- 2. Added target namespace: targetNamespace="http://www.exchangenetwork.net/schema/BEACHES/2"
- 3. Increased the maximum length of the Activity Monitoring Station ID to 65
- 4. Added the Year Completion Indicator elements
- 5. Removed the Transaction Type Codes
- 6. Renamed several elements to conform to the Exchange Network's Shared Schema Components naming conventions
- 7. Added the Beach Act Beach Indicator element
- 8. Added Swim Season Start and End Date option to specify the length of the swim season
- 9. Added Monitored Irregularly element and Monitored Irregularly Comment element to Monitoring Frequency Detail
- 10. Reorganized the Beach Pollution Source element

#### **Modification History**

The November, 2007 version of this document has been modified from the August, 2006 version to include information related to the Notification Schema upgrade.

The August, 2006 version of this document has been modified from the April, 2004 version to include more explicit information on:

- 1. ActivityStopDate
- 2. Correction in the ActivityIndicatorType allowable values
- 3. Clarification for the ActivityMonitoringStationIdentifier element
- 4. Updates related to changes in Notification Schema v1.2
- 5. Updated error codes (see page 4-1).
- 6. Addition of section detailing common causes of error messages (see page 4-5).
- 7. A new Appendix on custom submissions (see page 8-1).

The April, 2004 version of this document has been modified from the December, 2003 version to include mappings from the XML Schema Data Elements to the Notification Access Database, new error messages (BCH-0705, BCH-0804), and fixes a small technical document misprint (ActivityActualStopDate *is* a required XML tag).

The September, 2003 version of this document has been modified from the May, 2003 version to include new elements in the Notification Data XML schema, new error messages, changes to the Organization Role Types (LOCAL-AGENCY to LOCAL, and STATE\_AGENCY to STATE), and new pictures of the schema. Changes to the schema include:

- FIPS County Code replaces county name
- Beach Extent (Length, Units) added
- Beach Swim Season (Length, Units) added
- Monitoring Frequency (Swim Frequency, Offseason Frequency, Units) added
- Waterbody details (Waterbody Name, Waterbody Type, Waterbody Salinity) added
- STORET Organizations and Monitoring Stations for activities added
- Reasons, Sources, and Indicators (Type, Description) replace Reasons

# **Table of Contents**

1	Intr	oduction		1-1
2	How	to Subm	nit Data	2-1
	2.1	Submit	Data via CDX	2-1
	2.2	Detailed	d XML Processing Notes	2-3
3	How	to Unde	erstand the XML Submission	3-1
	3.1	Elemen	ts in the XML Schema and XML Files	3-1
		3.1.1	Organization Information	3-1
		3.1.2	Person Information	3-6
		3.1.3	Beach Information	3-12
		3.1.4	Beach Attribute Information	3-14
		3.1.5	Beach Activity Information	3-21
		3.1.6	Beach Role Information	3-27
		3.1.7	Year Completion Indicators	3-29
		3.1.8	Beach Procedure Information	3-30
		3.1.9	Header Information	3-31
	3.2	Use of I	Effective Date and Status Indicator Data Elements	3-32
4	How	to Deco	de the Error Messages	4-1
	4.1	System	Generated Error Messages	4-1
	4.2	Commo	on Causes of Error Messages	4-5
	4.3	Oracle (	Generated Error Messages	4-8
5	App	endix A S	Schema Graphics	5-1
6	App	endix B I	Example XML File	6-1
7	App	endix C l	Procedure Type Codes	7-1
R			Additional Notifications	8-1

## **List of Exhibits**

Exhibit 1 Data Transfer Diagram	2-3
Exhibit 2 PRAWN Error Messages	4-1
Exhibit 3 Beach Data Submission	5-1
Exhibit 4 Organization Detail	5-2
Exhibit 5 Organization Person Detail	5-3
Exhibit 6 Beach Name Detail	5-4
Exhibit 7 Beach Attribute Detail	5-5
Exhibit 8 Beach Activity Detail	5-6
Exhibit 9 Beach Role Detail	5-7
Exhibit 10 Beach Procedure Detail	5-7
Exhibit 11 Year Completion Indicators	5-8
Exhibit 12 Example Notification XML Document	8-1
Exhibit 13 Custom XML Generation	8-2

## 1 Introduction

The purpose of this document is to introduce representatives from state beach programs to the **PR**ogram tracking, beach **A**dvisories, **W**ater quality standards, and **N**utrients (PRAWN) database. All state beach program and notification (advisory and closing) data will be stored in PRAWN. In particular, this guide is intended for officials from State beach programs, the EPA's Beaches program, and any database administrators in charge of a state database.

The document can be used to explain the following about beach data submissions to EPA:

- How to Submit Data—explanation on how data is transferred from the originator (in most cases State Beach programs) through CDX to the EPA. Details about the transfers are separated into a second subsection for a more technical audience.
- How to Understand the XML Submission—explanation of the data that needs to be submitted to EPA and how that data should be formed within the XML document. Each section of the XML schema is explained in detail, and a specific section is devoted to explaining the use of the effective date and status indicator elements.
- How to Decode the Error Messages—explanation of the errors that the PRAWN database will produce due to logic and/or technical errors in the path between the creation of the XML document and the loading of data into PRAWN.
- Appendix D Additional Notifications—Description of designing and submitting notification data to PRAWN beyond the primary yearly submission.



## 2 How to Submit Data

States that need to submit Beach information to EPA need to take advantage of EPA's Central Data exchange (CDX) initiative to submit their data through a website.

#### 2.1 Submit Data via CDX

The Central Data eXchange (CDX) is an Office of Environmental Information (OEI) initiative to provide a single point of entry for incoming data into EPA. CDX will maintain a set of web pages where, once registered, States can log in and upload data files to EPA. Additional information on CDX and the Exchange Network can be found at: http://www.epa.gov/cdx.

The diagram on Page 2-3 (Exhibit 1) describes how data can be submitted from a State database to EPA's PRAWN database via CDX. For information on how to create a custom data submission, please see Section 8. The following table describes the steps involved in the process:

State Steps	CDX Automated Steps	PRAWN Automated Steps
1. Register in 3 places:		
A) Register with CDX via the CDX HelpDesk. Send an email to epacdx@csc.com or call 888-890-1995		
B) Register any new beaches with the EPA to create a unique EPA Beach ID for each beach in the state.		
C) Register water quality stations in WQX submissions (http://www.epa.gov/storet/wqx.html) or with the Web Registration or WebSIM tools (http://www.epa.gov/waterscience/beache s/grants/datausers/) <sup>1</sup>		
2. Create an XML document containing the appropriate data (see Chapter 3.1 Elements in the XML Schema and XML Files for the data to be included) using a local copy of the schema.		

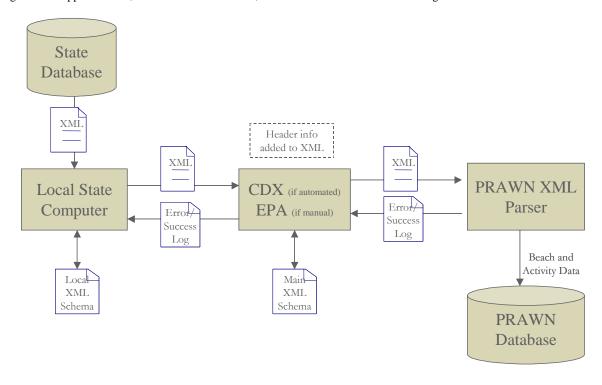
<sup>&</sup>lt;sup>1</sup> Web Registration and WebSIM are being replaced by WQX. Check STORET's web site for more information about when they will go offline.



State Steps	CDX Automated Steps	PRAWN Automated Steps
3. Upload the XML document from a local State computer to CDX via CDX's website: https://cdx.epa.gov/SSL/cdx/login.asp		
	4. Archive the file and validate the XML document against the schema. If errors are found, send a CDX error log to the State user; otherwise, skip to Step 6.	
5. Visit MyCDX Inbox for error/success log messages. If a CDX error log is received, go back to Step 2 and fix the errors.		
	6. Once the XML document passes validation, add the header information and transfer the XML document to the PRAWN XML Parser.	
		7. Validate the XML document against the business rules. If errors are found, create an error log to CDX; otherwise, skip to Step 10.
	8. If a PRAWN error log is created, pass it along to the State.	
9. Make a second visit to MyCDX Inbox. If a PRAWN error log is received, go back to Step 2 and fix the errors.		
		10. When the XML file is received that passes the business rules, parse the data into the database and create a success log.
	11. If a PRAWN success log is created, pass it along to the State.	



Begin on the upper left side, labeled "State Database", and follow the flow of arrows through the "PRAWN Database".



## 2.2 Detailed XML Processing Notes

The following technical notes support the processes described in the previous two sections of this chapter:

- Empty tags such as <OrganizationCode></OrganizationCode> or <OrganizationCode/> will not be accepted.
- If the XML submission passes the validation routine, information about the submission will be inserted into the following four XML tags: SubmissionIdentifier, SubmittingAgencyIdentifier, SubmittingUserIdentifier, and SubmissionDate. These four tags are enclosed in tags labeled HeaderInformation. The HeaderInformation tag must appear second in the file after the BeachDataSubmission tag.
- When the XML load process is complete, any errors will be written to an error file of the same name, with a .log extension instead of the .xml extension.



### 3 How to Understand the XML Submission

This chapter describes the XML data files and the associated XML schema to be used for the PRAWN database.

#### 3.1 Elements in the XML Schema and XML Files

The XML schema for the data submissions to PRAWN provides a template for the XML files to be submitted. This schema describes the data elements to be included in the XML document and is also used to validate it. Files are accepted or rejected based on their conformity to the schema.

A graphical version of this schema is provided in Appendix A and an example XML document is provided in Appendix B of this document. Please refer to these appendices when creating an XML document.

This section contains descriptions of the data elements in the PRAWN XML Schema. For each table in the following sections, the following information is provided:

- Data Element: The name of the data element stored in the XML data file.
- XML Tag Name: The XML key associated with the data element.
- XML Data Type: The XML data type for this element.
- Length: The maximum length for the data element for character and numeric data types.
- Req'd (Y/N): This value indicates if the column is required in the XML data file. Please note that empty tags such as <OrganizationCode></OrganizationCode> or <OrganizationCode/> will not be accepted when the element is not required.
- Comments: Additional comments related to the XML data element.

For questions on the conventions and formats used in the schema, reference the Exchange Network's *XML Schema Design Rules and Conventions*<sup>2</sup>.

#### 3.1.1 Organization Information

The organization information section of the XML submission contains data related to the organizations involved in the Beach Act Grant Program, such as organization code, organization name, organization description, and contact information. These data elements will be included in the XML file when organization data needs to be added or updated in the PRAWN database.



<sup>&</sup>lt;sup>2</sup> The Exchange Network's *XML Schema Design Rules and Conventions* can be found here: http://www.exchangenetwork.net/dev\_schema/drc.htm

All XML elements in this section are located in the following position on the XML element hierarchy—"BeachDataSubmission/OrganizationDetail/".

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Organization Identifier Example: 987654321098	OrganizationIdentifie r	STRING	Y	12	ORGANIZATION.ID, PERSON.FK_ORGANIZATIO N_ID, MAILING_ADDRESS.FK_OR GANIZATION_ID, ELECTRONIC_ADDRESS.FK _ORGANIZATION_ID, BEACH_ORGANIZATION_R OLE_ASSIGN.FK_ORGANIZ ATION_ID	An organization refers to the entity associated with a Notification submitted to PRAWN. The type of entity is noted in the 'Organization Type Code' field.  EPA will maintain a list of valid Organization Identifiers for all organizations that are stored in the PRAWN database. These identifiers must be unique, as they will be used to update organization-level data.
Organization Type Code  Example: STATE_AGNCY	OrganizationNameD etail/OrganizationTy peCode	STRING	Y	12	ORGANIZATION.ORGANI ZATION_CODE	This value must be set to one of the following:  STATE_AGNCY (State Agency)  EPA (U.S. EPA)  PUB_INT_GRP (Public Interest Group)  LOCAL_GOV (Local Government)  PRIVATE (Private Company)  OW (U.S. EPA Office of Water)  OW_DIV (U.S. EPA Office of Water Division)  OW_BRANCH (U.S. EPA Office of Water Branch)  This value is required if any organization name information is included in the XML data file.
Organization Name  Example: Maine Department of Environmental Protection	OrganizationNameD etail/OrganizationNa me	STRING	Y	60	ORGANIZATION.NAME	This value is required if any organization name information is included in the XML data file
Organization Description Text  Example: Maine DEP	OrganizationNameD etail/OrganizationDe scriptionText	STRING	N	255	ORGANIZATION.DESCRIP TION	



Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Organization Abbreviation Text Example:	OrganizationNameD etail/OrganizationAb breviationText	STRING	N	30	ORGANIZATION.ABBREVI ATION	
MDEP						
Organization Mailing Address Type Code	OrganizationMailing AddressDetail/Maili ngAddressTypeCode	STRING	Y	12	MAILING_ADDRESS.MAIL ING_ADDRESS_CODE	This value must be set to one of the following:  SHIPPING (Shipping Address)
Example: MAILING						<ul> <li>MAILING (Mailing Address)</li> <li>OTHER (Other Address)</li> </ul>
						This value is required if any organization mailing address information is included in the XML data file.
Organization Mailing Address Street Line 1 Text	OrganizationMailing AddressDetail/Maili ngAddressStreetLine 1Text	STRING	Y	100	MAILING_ADDRESS.LINE _1	This value is required if any organization mailing address information is included in the XML data file.
Example: 14 Main Rd.						
Organization Mailing Address Street Line 2 Text	OrganizationMailing AddressDetail/Maili ngAddressStreetLine 2Text	STRING	N	100	MAILING_ADDRESS.LINE _2	
Example: Suite 4						
Organization Mailing Address Street Line 3 Text	OrganizationMailing AddressDetail/Maili ngAddressStreetLine 3Text	STRING	N	100	MAILING_ADDRESS.LINE _3	
Example: Building 12						
Organization Mailing Address City Text	OrganizationMailing AddressDetail/Maili ngAddressCityName	STRING	Y	50	MAILING_ADDRESS.CITY	This value is required if any organization mailing address information is included in the XML data
Example: Augusta						file.



Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Organization Mailing Address State Code	OrganizationMailing AddressDetail/State Code	STRING	Y	2	MAILING_ADDRESS.STAT E_POSTAL_CODE	This value is required if any organization mailing address information is included in the XML data file.
Example: ME						This value must be a valid 2-character State Postal Code.
Organization Mailing Address Zip Code	OrganizationMailing AddressDetail/Addre ssPostalCode	STRING	Y	12	MAILING_ADDRESS.ZIP_ CODE	This value is required if any organization mailing address information is included in the XML data file.
Example: 04333						This value must be in one of the following numeric formats:
						<b>#####</b>
						or
						<b>#####-####</b>
Organization Mailing Address Effective Date	Mailing Address Effective Date  Example: 2003-  AddressDetail/Mailing AddressEffective Date	DATE Y	Y		MAILING_ADDRESS.EFFE CTIVE_DATE	This value is required if any organization mailing address information is included in the XML data file.
01-01T00:00:00						The date should be entered in the XML file in the following format: <i>YYYY-MM-DDTHH:MI:SS</i>
						This value should be set to the date on which the mailing address information became effective or will become effective.
						Please see Section 3.2 Use of Effective Date and Status Indicator Data Elements for more information.
Organization Mailing Address Status Indicator	OrganizationMailing AddressDetail/Maili ngAddressStatusIndi	STRING	Y	8	MAILING_ADDRESS.STAT US	This value is required if any organization mailing address information is included in the XML data
Example: ACTIVE	cator					file.  This value must be set to "ACTIVE" or "INACTIVE".
						Please see Section 3.2 Use of Effective Date and Status Indicator Data Elements for more information.



Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Organization Electronic Address Type Code Example: URL	OrganizationElectron icAddressDetail/Elec tronicAddressTypeC ode	STRING	Y	12	ELECTRONIC_ADDRESS.E LECTRONIC_ADDRESS_C ODE	This value must be set to one of the following:  EMAIL (E-mail)  URL (URL)  OTHER (Other)  This value is required if any organization electronic address information is included in the XML data file.
Organization Electronic Address Text  Example: http://www.main e.gov/dep/blwq/ beach.htm	OrganizationElectron icAddressDetail/Elec tronicAddressText	STRING	Y	255	ELECTRONIC_ADDRESS.A DDRESS	This value is required if any organization electronic address information is included in the XML data file.
Organization Electronic Address Effective Date Example: 2003- 01-01T00:00:00	OrganizationElectron icAddressDetail/Elec tronicAddressEffecti veDate	DATE	Y		ELECTRONIC_ADDRESS.E FFECTIVE_DATE	This value is required if any organization electronic address information is included in the XML data file.  The date should be entered in the XML file in the following format: YYYY-MM-DDTHH:MI:SS  This value should be set to the date on which the electronic address information became effective or will become effective.  Please see Section 3.2 Use of Effective Date and Status Indicator Data Elements for more information.
Organization Electronic Address Status Indicator Example: ACTIVE	OrganizationElectron icAddressDetail/Elec tronicAddressStatusI ndicator	STRING	Y	8	ELECTRONIC_ADDRESS.S TATUS	This value is required if any organization electronic address information is included in the XML data file.  This value must be set to "ACTIVE" or "INACTIVE".  Please see Section 3.2 Use of Effective Date and Status Indicator Data Elements for more information.



Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Organization Telephone Type	OrganizationTelepho neDetail/TelephoneT	STRING	Y	12	TELEPHONE.TELEPHONE _CODE	This value must be set to one of the following:
Code	ypeCode					■ FAX ( <i>Fax</i> )
Example:						■ VOICE (Voice)
VOICE						■ PAGER (Pager)
						■ CELL (Cellular/Mobile)
						■ OTHER (Other)
						This value is required if any organization telephone information is included in the XML data file.
Organization Telephone Number	OrganizationTelepho neDetail/TelephoneN umberText	STRING	Y	12	TELEPHONE.TELEPHONE _NUMBER	This value is required if any organization telephone information is included in the XML data file.
Example: 207- 287-3901						This value must be in the following alphanumeric format:
						<ul><li>XXX-XXX-XXXX</li></ul>
Organization Telephone Effective Date	OrganizationTelepho neDetail/EffectiveDa te	DATE	Y		TELEPHONE.EFFECTIVE_ DATE	This value is required if any organization telephone information is included in the XML data file.
Example: 2003- 01-01T00:00:00						The date should be entered in the XML file in the following format: <i>YYYY-MM-DDTHH:MI:SS</i>
						This value should be set to the date on which the telephone information became effective or will become effective.
						Please see Section 3.2 Use of Effective Date and Status Indicator Data Elements for more information.
Organization Telephone Status Indicator	OrganizationTelepho neDetail/StatusIndica tor	STRING	Y	8	TELEPHONE.STATUS	This value is required if any organization telephone information is included in the XML data file.
Example: ACTIVE						This value must be set to "ACTIVE" or "INACTIVE".
						Please see Section 3.2 Use of Effective Date and Status Indicator Data Elements for more information.

#### 3.1.2 Person Information

The person information section of the XML submission contains data related to the people associated with the beaches overseen by the National Beach Watch Program. Examples of this data include person



identifier code, name, title, and contact information. These data elements will be included in the XML file when person data needs to be added or updated in the PRAWN database.

In the XML schema, each person is affiliated with exactly one organization. However, each organization can be associated with many people.

All XML elements in this section are located in the following position on the XML element hierarchy—"BeachDataSubmission/OrganizationDetail/OrganizationPersonDetail/".

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Person Identifier  Example:  JOSM	PersonIdentifier	STRING	Y	12	PERSON.ID, BEACH_PERSON_ROLE_A SSIGN.FK_PERSON_ID, ELECTRONIC_ADDRESS.F K_PERSON_ID, MAILING_ADDRESS.FK_P ERSON_ID, TELEPHONE.FK_PERSON_ID	Submitting organizations will need to maintain a list of valid Person Identifiers for all people that are stored in the PRAWN database. These identifiers must be unique within each organization, as they will be used to update organization-level data. (For example, with an organization there can only be 1 person identified as "JOSM", but there could be another person identified as "JOSM" in another organization.)
Person Status Indicator Example: ACTIVE	PersonNameDetail/P ersonStatusIndicator	STRING	Y	8	PERSON.ACTIVE	This value if required if any person name information is included in the XML data file.  This value must be set to "ACTIVE" or "INACTIVE".
Person First Name Example: John	PersonNameDetail/F irstName	STRING	Y	50	PERSON.FIRST_NAME	This value if required if any person name information is included in the XML data file.
Person Last Name Example: Smith	PersonNameDetail/L astName	STRING	Y	50	PERSON.LAST_NAME	This value if required if any person name information is included in the XML data file.



Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Person Middle Initial  Example: S	PersonNameDetail/P ersonMiddleInitial	STRING	N	2	PERSON.MIDDLE_INITIAL	The two characters in the 'Person Middle Initial' can be used as needed by the submitting state. For example, if there are two people within a given organization called 'Bob A Smith', using the second letter of the Middle Name as the second letter of the 'Person Middle Initial' can be a valuable method used to differentiate between the two. Or, a period can be inserted after the first letter. Or, the second space can be left blank.
Person Suffix  Example: Jr.	PersonNameDetail/N ameSuffixText	STRING	N	5	PERSON.SUFFIX	
Person Title  Example: Mr.	PersonNameDetail/N amePrefixText	STRING	N	60	PERSON.TITLE	
Person Mailing Address Type Code Example: SHIPPING	PersonMailingAddre ssDetail/MailingAdd ressTypeCode	STRING	Y	12	MAILING_ADDRESS.MAIL ING_ADDRESS_CODE	This value must be set to one of the following:  SHIPPING (Shipping Address)  MAILING (Mailing Address)  OTHER (Other Address)  This value is required if any person mailing address information is included in the XML data file.
Person Mailing Address Street Line 1 Text Example: 14 Main Rd.	PersonMailingAddre ssDetail/MailingAdd ressStreetLine1Text	STRING	Y	100	MAILING_ADDRESS.LINE _1	This value is required if any person mailing address information is included in the XML data file.
Person Mailing Address Street Line 2 Text Example: Suite	PersonMailingAddre ssDetail/MailingAdd ressStreetLine2Text	STRING	N	100	MAILING_ADDRESS.LINE _2	



Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Person Mailing Address Street Line 3 Text	PersonMailingAddre ssDetail/MailingAdd ressStreetLine3Text	STRING	N	100	MAILING_ADDRESS.LINE _3	
Example: Building 12						
Person Mailing Address City Text Example: Augusta	PersonMailingAddre ssDetail/MailingAdd ressCityName	STRING	Y	50	MAILING_ADDRESS.CITY	This value is required if any person mailing address information is included in the XML data file.
Person Mailing Address State Code	PersonMailingAddre ssDetail/StateCode	STRING	Y	2	MAILING_ADDRESS.STAT E_POSTAL_CODE	This value is required if any person mailing address information is included in the XML data file.
Example: ME						This value must be a valid 2-character State Postal Code.
Person Mailing Address Zip Code	PersonMailingAddre ssDetail/AddressPost alCode	STRING	Y	12	MAILING_ADDRESS.ZIP_C ODE	This value is required if any person mailing address information is included in the XML data file.
Example: 04333						This value must be in one of the following numeric formats:
0.7555						<b>#####</b>
						or
						<b>#####</b>
Person Mailing Address Effective Date	PersonMailingAddre ssDetail/MailingAdd ressEffectiveDate	DATE	Y		MAILING_ADDRESS.EFFE CTIVE_DATE	This value is required if any person mailing address information is included in the XML data file.
Example: 2003- 01-01T00:00:00						The date should be entered in the XML file in the following format: <i>YYYY-MM-DDTHH:MI:SS</i>
						This value should be set to the date on which the mailing address information became effective or will become effective.
						Please see Section 3.2 Use of Effective Date and Status Indicator Data Elements for more information.



Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Person Mailing Address Status Indicator	PersonMailingAddre STRING Y 8 MAILING_ADDRES ssDetail/MailingAdd US ressStatusIndicator	MAILING_ADDRESS.STAT US	This value is required if any person mailing address information is included in the XML data file.			
Example: ACTIVE						This value must be set to "ACTIVE" or "INACTIVE".
						Please see Section 3.2 Use of Effective Date and Status Indicator Data Elements for more information.
Person Electronic	PersonElectronicAdd ressDetail/Electronic	STRING	Y	12	ELECTRONIC_ADDRESS.E LECTRONIC_ADDRESS_C ODE	This value must be set to one of the following:
Address Type Code	AddressTypeCode					■ EMAIL ( <i>E-mail</i> )
Example:						■ URL (URL)
EMAIL	•					This value is required if any person electronic address information is included in the XML data file.
Person Electronic Address Text	PersonElectronicAdd ressDetail/Electronic AddressText	STRING	Y	255	ELECTRONIC_ADDRESS.A DDRESS	This value is required if any person electronic address information is included in the XML data file.
Example: Smith.Bob@mai ne.gov						
Person Electronic Address	PersonElectronicAdd ressDetail/Electronic AddressEffectiveDat	DATE	Y		ELECTRONIC_ADDRESS.E FFECTIVE_DATE	This value is required if any person electronic address information is included in the XML data file.
Effective Date  Example: 2003- 01-01700:00:00	e		The date should be entered in the XML file in the following format: <i>YYYY-MM-DDTHH:MI:SS</i>			
01-01T00:00:00						This value should be set to the date on which the electronic address information became effective or will become effective.
						Please see Section 3.2 Use of Effective Date and Status Indicator Data Elements for more information.



Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Person Electronic Address Status	PersonElectronicAdd ressDetail/Electronic AddressStatusIndicat	STRING	Y	8	ELECTRONIC_ADDRESS.S TATUS	This value is required if any person electronic address information is included in the XML data file.
Indicator  Example:	or					This value must be set to "ACTIVE" or "INACTIVE".
ACTIVE						Please see Section 3.2 Use of Effective Date and Status Indicator Data Elements for more information.
Person Telephone Type Code	PersonTelephoneDet ail/TelephoneTypeC	STRING	Y	12	TELEPHONE.TELEPHONE_ TYPE_CODE	This value must be set to one of the following:
	ode					$\blacksquare  \text{FAX } (Fax)$
Example: CELL						■ VOICE (Voice)
						■ PAGER (Pager)
						■ CELL (Cellular/Mobile)
						• OTHER (Other)
						This value is required if any person telephone information is included in the XML data file.
Person Telephone Number	PersonTelephoneDet ail/TelephoneNumbe rText	STRING	Y	12	TELEPHONE.TELEPHONE_ NUMBER	This value is required if any person telephone information is included in the XML data file.
Example: 207- 287-1111						This value must be in the following alphanumeric format:
						<ul><li>XXX-XXX-XXXX</li></ul>
Person Telephone Effective Date	PersonTelephoneDet ail/EffectiveDate	DATE	Y		TELEPHONE.EFFECTIVE_ DATE	This value is required if any person telephone information is included in the XML data file.
Example: 2003- 01-01T00:00:00						The date should be entered in the XML file in the following format: <i>YYYY-MM-DDTHH:MI:SS</i>
						This value should be set to the date on which the telephone information became effective or will become effective.
						Please see Section 3.2 Use of Effective Date and Status Indicator Data Elements for more information.



Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Person Telephone Status Indicator	PersonTelephoneDet ail/StatusIndicator	STRING	Y	8	TELEPHONE.STATUS	This value is required if any person telephone information is included in the XML data file.
Example: ACTIVE						This value must be set to "ACTIVE" or "INACTIVE".
						Please see Section 3.2 Use of Effective Date and Status Indicator Data Elements for more information.

#### 3.1.3 Beach Information

The Beach Information section of the XML submission contains data related to the beaches overseen by the National Beach Program, such as beach name, beach description, state code, and county code. These data elements will be included in the XML file when beach information needs to be added or updated in the PRAWN database.

All XML elements in this section are located in the following position on the XML element hierarchy—"BeachDataSubmission/BeachDetail/".

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Beach Identifier  Example:  ME234898	BeachIdentifier	STRING	Y	8	BEACH.ID, BEACH_ACTIVITY.FK_BE ACH_ID, BEACH_PROCEDURE_ASS IGN. FK_BEACH_ID, BEACH_PERSON_ROLE_A SSIGN. FK_BEACH_ID, BEACH_ORGANIZATION_ ROLE_ASSIGN. FK_BEACH_ID	EPA maintains a list of valid Beach Identifiers for all beaches that are stored in the PRAWN database. Each new identifier must be registered with EPA before it can be submitted. These identifiers must be unique, as they will be used to update beach-level data.  *Send request for new Beach ID to ebeaches@cgifederal.com
Beach Name  Example: Sandy  Beach Point	BeachNameDetail/Pr ogramInterestName	STRING	Y	60	BEACH.NAME	This value is required if any beach name information is included in the XML data file.



Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Beach Description Text  Example: Rocky, big waves, no pollution	BeachNameDetail/Pr ogramInterestDescri ptionText	STRING	Y	255	BEACH.DESCRIPTION	This value is required if any beach name information is included in the XML data file.
Beach Comment Text Example: A nice place to surf	BeachNameDetail/Pr ogramInterestComm entText	STRING	N	255	BEACH.COMMENT	This is an optional field that can be used to store other information about the particular beach that is not included in an official description.
Beach State Code Example: ME	BeachNameDetail/Pr ogramInterestStateC ode	STRING	Y	2	BEACH.STATE_POSTAL_C ODE	This value is required if any beach name information is included in the XML data file.  This value must be a valid 2-character State Postal Code.
Beach FIPS County Code Example: 23001	BeachNameDetail/Pr ogramInterestFIPSC ountyCode	STRING	Y	5	BEACH.FIPS.COUNTY	This value is required if any beach name information is included in the XML data file.  This value must be a valid 5 digit code representing a county, as assigned by the Federal Information Processing Standards Publications (FIPS). The first two digits represent the state, while the last three digits represent the specific county.  FIPS county codes can be found at http://www.itl.nist.gov/fipspubs/co-codes/states.htm



Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Beach Accessibility Type Example: PUB_PRV_ACC	BeachNameDetail/B eachAccessibilityDet ail/BeachAccessibilit yType	STRING	Y	12	BEACH.ACCESS_TYPE	This value is required if any beach name information is included in the XML data file.  The value must be set to one of the following:  PUB_PUB_ACC (Public Beach with Public Access)  PRV_PRV_ACC (Private Beach with Private Access)  PUB_PRV_ACC (Public Beach with Private Access)  PRV_PUB_ACC (Private Beach with Private Access)
Beach Accessibility Comment  Example: Public Property at the end of a road.	BeachNameDetail/B eachAccessibilityDet ail/BeachAccessibilit yComment	STRING	N	255	BEACH.ACCESS_COMME NT	This is an optional field that can be used to store other information about the beach access that is not included in an official description.

#### 3.1.4 Beach Attribute Information

The beach attribute section of the XML submission contains data related to beach information that may change over time, such as beach extent (length), swim season length, and monitoring frequency.

States should submit one 'Beach Attribute Detail' section each year for each beach.

All XML elements in this section are located in the following position on the XML element hierarchy—"BeachDataSubmission/BeachDetail/BeachAttributeDetail/".

lyne	Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
------	--------------	--------------	---------------------	----------------	--------	----------------------	---------



Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Attribute Effective Year	AttributeEffectiveYe ar	STRING	Y	4	BEACH_ATTRIBUTE.EFFE CTIVE_YEAR	This value is required if any beach attribute information is included in the XML data file.
Example: 2006						Attribute Effective Year is appended to each of the beach extent, swim season, and monitoring frequency records in PRAWN to distinguish the change over time.
						This value must be updated every year, even if the subsequent attribute information does not change, in order to verify the correct information for a beach.
Beach Extent Length Measure Example: 5	BeachExtentDetail/E xtentLengthMeasure	NUMBE R	Y	14	BEACH_ATTRIBUTE.EXTE NT_LENGTH	This value is required if any beach name information is included in the XML data file.
Example. 5						This value is the numeric equivalent of the length of a beach, along with the units of measure below.
Beach Extent Length Unit of Measure Example: MI	BeachExtentDetail/E xtentUnitOfMeasure Code	STRING	Y	12	BEACH_ATTRIBUTE.EXTE NT_UNITS	This value must be set to one of the following:  MI (Miles) FT (Feet) YDS (Yards) M (Meters) KM (Kilometers) This value is required if any beach name information is included in the XML data file.
Swim Season Start Date Example: 1/1/2007	BeachSwimSeasonL engthDetail/SwimSe asonStartDate	DATE	Y	n/a	BEACH_ATTRIBUTE. SWIM_SEASON_START_D ATE	Either the combination of Swim Season Start Date and Swim Season End or the combination of Beach Season Length and Beach Season Unit of Measure are required if any beach name information is included in the XML data file. The combination of Swim Season Start Date and Swim Season End Date is preferred. If both are sets of information are included, Swim Season Start Date and Swim Season End Date will be used. This value is the date the beach swim



season starts for the year.

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Swim Season End Date Example: 12/31/2007	BeachSwimSeasonL engthDetail/SwimSe asonEndDate	DATE	Y	n/a	BEACH_ATTRIBUTE. SWIM_SEASON_END_DAT E	Either the combination of Swim Season Start Date and Swim Season End or the combination of Beach Season Length and Beach Season Unit of Measure are required if any beach name information is included in the XML data file. The combination of Swim Season Start Date and Swim Season End Date is preferred. If both are sets of information are included, Swim Season Start Date and Swim Season End Date will be used.
						This value is the date the beach swim season ends for the year.
Beach Season Length Example: 150	BeachSwimSeasonL engthDetail/SwimSe asonLengthMeasure	NUMBE R	Y	14	BEACH_ATTRIBUTE.SWI M_SEASON_LENGTH	Either the combination of Swim Season Start Date and Swim Season End or the combination of Beach Season Length and Beach Season Unit of Measure are required if any beach name information is included in the XML data file. The combination of Swim Season Start Date and Swim Season End Date is preferred. If both are sets of information are included, Swim Season Start Date and Swim Season End Date will be used.
						This value is the numeric equivalent of the amount of time in a swim season, along with the units of measure below.
Beach Season Unit of Measure Example: DAYS	BeachSwimSeasonL engthDetail/SwimSe asonUnitOfMeasure Code	STRING	Y	12	BEACH_ATTRIBUTE.SWI M_SEASON_UNITS	This value must be set to one of the following:  DAYS (Days) WEEKS (Weeks) MONTHS (Months)
						Either the combination of Swim Season Start Date and Swim Season End or the combination of Beach Season Length and Beach Season Unit of Measure are required if any beach name information is included in the XML data file. The combination of Swim Season Start Date and Swim Season End Date is preferred. If both are sets of information are included, Swim Season Start Date and Swim Season End Date will be used.



Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Swim Season Monitoring Frequency	MonitoringFrequenc yDetail/SwimSeason FrequencyMeasure	NUMBE R		14	BEACH_ATTRIBUTE.SWI M_MONITOR_FREQ	This value is required if any beach attribute information is included in the XML data file.
Example: 10						This value is the numeric equivalent of the frequency of monitoring performed during the designated Swim Season, as defined in the previous tags. The Swim Season Monitoring Frequency corresponds to the units of measure below.
						If monitoring is not performed on the beach during the swim season, please enter a 0 (zero) for this value.
Off Season Monitoring Frequency	ing yDetail/OffSeasonFr R cy equencyMeasure	NUMBE Y R	Y	14	BEACH_ATTRIBUTE.OFF_ MONITOR_FREQ	This value is required if any beach attribute information is included in the XML data file.
Example: 2					This value is the numeric equivalent of the frequency of monitoring performed outside of the designated Swim Season, as defined in the previous tags. The Off Season Monitoring Frequency corresponds to the units of measure below.	
						If monitoring is not performed on the beach during the off season, please enter a 0 (zero) for this value.
Monitoring Frequency Unit	MonitoringFrequenc yDetail/MonitoringF	STRING	Y	12	BEACH_ATTRIBUTE.MON ITOR_FREQ_UNITS	This value must be set to one of the following:
of Measure  Example: PER_WEEK	requencyUnitOfMea sureCode					<ul> <li>PER_DAY (Per Day)</li> <li>PER_WEEK (Per Week)</li> <li>PER_MONTH (Per Month)</li> <li>PER_YEAR (Per Year)</li> </ul>
						This value is required if any beach attribute information is included in the XML data file.
						This value corresponds to both the Swim Season and Off Season Monitoring Frequencies. For example, if the Swim Season Monitoring Frequency Measure is 10, and the Units are PER_WEEK, the frequency reads "The beach is monitored 10 times per week during the swim season."



Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Monitored Irregularly Indicator Example: Y	MonitoredIrregularly	BOOLE AN	Y	1	BEACH_ATTRIBUTE. MONITORED_IRREGULAR LY	This value is required if any beach attribute information is included in the XML data file.
						This should be "Y" if the beach is monitored irregularly and "N" otherwise.
Monitored Irregularly Comment	MonitoredIrregularly Comment	Text	N	255	BEACH_ATTRIBUTE. MONITORED_IRREGULAR LY_COMMENT	Any comments the about the regularity of the monitoring.
No Pollutions Sources Indicator	NoPollutionSourcesI ndicator	BOOLE AN	Y	1	NO_POLLUTION_SOURCE S	One of the following is required if any beach attribute information is included in the XML data file:
Example: Y						• No Pollution Source Indicator set to "Y"
						• Pollution Sources Uninvestigated Indicator set to "Y"
						• A list of pollution sources in the BEACH_POLLUTION table
						Note, if more than one is provided the first one in this list will be used.
						This should be "Y" if the beach pollution sources have been investigated and none were found and "N" otherwise.
Pollutions Sources Uninvestigated	PollutionsSourcesUn investigatedIndicator	BOOLE AN	Y	1	POLLUTION_SOURCES_U NINVESTIGATED	One of the following is required if any beach attribute information is included in the XML data file:
Indicator  Example: Y						No Pollution Source Indicator set to "Y"
						• Pollution Sources Uninvestigated Indicator set to "Y"
						• A list of pollution sources in the BEACH_POLLUTION table
						Note, if more than one is provided the first one in this list will be used.
						This should be "Y" if the beach pollution sources have not been investigated and "N" otherwise.



Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Beach Pollution Source Code Example: SEWER_LINE	BeachPollutionSource eDetail/BeachPollutionSourceCode	STRING	N	12	BEACH_POLLUTION.POLL UTION_SOURCE	This value must be set to one of the following:  AGRICULTURAL (Agricultural Runoff)  BOAT (Boat Discharge)  CAFO (Concentrated Animal Feeding Operation)  CSO (Combined Sewer Overflow)  POTW (Publicly-Owned Treatment Works)  RUNOFF (Non-storm Related/Urban/Dryweather runoff)  SEPTIC (Septic System Leakage)  SEWER_LINE (Sewer Line Leak/Break/Blockage)  SSO (Sanitary Sewer Overflow)  STORM (Storm Related/Wet-Weather Runoff)  WILDLIFE (Wildlife)  UNKNOWN (Unknown)  OTHER (Other-Specify in Description Field)  This value is designed to allow states to store known pollution sources impacting a given beach. These pollution sources should include any that impact a given beach, not just those that generate notifications, so there may be more than one pollution source included.  Additionally, note that submitting a beach with no potential pollution sources is identical to saying that no pollution sources are known to impact that beach.
Beach Pollution Source Description	BeachPollutionSourc eDetail/BeachPolluti onSourceDescription	STRING	N	255	BEACH_POLLUTION.POLL UTION_COMMENT	This is an optional field that can be used to store other information about the beach pollution source that is not included in an official description.



Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Beach Tier Example: 2	BeachTierRanking	ting NUMBE Y 1 BEACH_ATTRIBUTE.BE R CH_TIER (0-9)	Y	1	BEACH_ATTRIBUTE.BEA CH_TIER	This value is required if any beach attribute information is included in the XML data file.
				The ranking system for this value is set by individual states, so the ranges may differ (e.g., State A may have tiers 1 and 2, while State B may have tiers 1, 2, and 3)		
						States with no tier system should enter a value of '1' for all beaches.
Beach Act Beach Indicator Example: Y	BeachActBeachIndic ator	BOOLE AN	Y	1	BEACH_ATTRIBUTE.BEA CH_ACT_BEACH	This value is required if any beach attribute information is included in the XML data file.
						This should be "Y" if the beach qualifies as a BEACH Act beach and "N" otherwise.



#### 3.1.5 Beach Activity Information

The beach activity section of the XML submission contains data related to beach advisories and closures, such as activity type code, activity name, activity description text, and activity reason. These data elements will be included in the XML file when activity or closure information needs to be added to the PRAWN database. Beach activity information can only be added to the PRAWN database; it cannot be updated. Since activities require a start and stop date, only completed activities should be submitted.

States should submit one 'Beach Activity Detail' section per any one of the Activity Type Codes. Multiple 'Beach Activity Detail' sections can appear under one 'Beach Detail' section.

All XML elements in this section are located in the following position on the XML element hierarchy—"BeachDataSubmission/BeachDetail/BeachActivityDetail/".

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Activity Type Code	ActivityTypeCode	STRING	Y	12	BEACH_ACTIVITY.ACTIVI TY_CODE	This value must be set to one of the following:
Example: CLOSURE						<ul> <li>CONTAM_ADV (Contamination Advisory)</li> <li>CLOSURE (Closure)</li> <li>PERM_CLOSURE (Permanent Closure)</li> <li>RAIN_ADV (Rain Advisory)</li> <li>This value is required if any beach activity information is included in the XML data file.</li> <li>States should submit one 'Beach Activity Detail' section per any one of the above activities.</li> </ul>
						Activity Type Code and Activity Name are related in so far as the Activity Name can be used to keep track of the various activity types by assigning a local name to the various activities. There is not an Identifier in this portion of the data submission to aid in this endeavor.



Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Activity Name  Example:	ActivityName	STRING	Y	60	BEACH_ACTIVITY.NAME	This value is required if any beach activity information is included in the XML data file.
Closure 34						Activity Type Code and Activity Name are related in so far as the Activity Name can be used to keep track of the various activity types by assigning a local name to the various activities. There is not an Identifier in this portion of the data submission to aid in this endeavor.
Activity Actual Start Date	ActivityActualStartD ate	DATE	Y		BEACH_ACTIVITY.ACTUA L_START_DATE	This value is required if any beach activity information is included in the XML data file.
Example: 2002- 04-12T02:00:00						The date should be entered in the XML file in the following format: YYYY-MM-DDTHH:MI:SS
Activity Actual Stop Date	ActivityActualStopD ate	DATE	Y		BEACH_ACTIVITY.ACTUA L_STOP_DATE	This value is required if any beach activity information is included in the
Example: 2002- 04-16T06:30:00						XML data file.  The date should be entered in the XML file in the following format: <i>YYYY-MM-DDTHH:MI:SS</i>



Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Activity Reason Type Example: ELEV_BACT	ActivityReasonDetai l/ActivityReasonTyp e	STRING	Y	60	BEACH_ACTIVITY_REAS ON.TYPE (BEACH_ACTIVITY_REAS ON.CLASS = 'REASON')	This value must be set to one of the following:  ELEV_BACT (Monitoring that revealed elevated bacteria levels)  RAINFALL (Preemptive-Rainfall)  SEWAGE (Preemptive-Sewage discharge or spill)  CHEM_OIL (Preemptive-Chemical or oil discharge or spill)  MODEL (Model prediction)  POLICY (Policy dictates action)  OTHER (Other-Please specify in the Description field)  This value is required only if beach activity information AND beach activity reason information is included in the XML data file.  The Beach Activity Reason Type field is used to supply information regarding the reason for the activity denoted in the Activity Type Code field.  Any number of Reason Detail sections may be submitted (consecutively in the XML file) to associate many reasons to a single activity.  Note that activities with Type 'ELEV_BACT' must submit at least one Monitoring Station Identifier.
Activity Reason Description Text Example: Exceeded Water Quality Standards	ActivityReasonDetai l/ActivityReasonDes criptionText	STRING	N	255	BEACH_ACTIVITY_REAS ON.DESCRIPTION (BEACH_ACTIVITY_REAS ON.CLASS = 'REASON')	The Beach Activity Reason Description field is used to supply additional information regarding the reason for the activity denoted in the Activity Type Code field.



Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Activity Source Type Example: CSO	ActivitySourceDetail /ActivitySourceType	STRING	Y	60	BEACH_ACTIVITY_REAS ON.TYPE (BEACH_ACTIVITY_REAS ON.CLASS = 'SOURCE')	This value must be set to one of the following:  AGRICULTURAL (Agricultural Runoff)  BOAT (Boat Discharge)  CAFO (Concentrated Animal Feeding Operation)  CSO (Combined Sewer Overflow)  POTW (Publicly-Owned Treatment Works)  RUNOFF (Non-storm Related/Urban/Dryweather runoff)  SEPTIC (Septic System Leakage)  SEWER_LINE (Sewer Line Leak/Break/Blockage)  SSO (Sanitary Sewer Overflow)  STORM (Storm Related/Wet-Weather Runoff)  WILDLIFE (Wildlife)  UNKNOWN (Unknown)  OTHER (Other-Specify in Description Field)  This value is required only if beach activity information AND beach activity source information is included in the XML data file.  The Beach Activity Source Type field is used to supply information regarding the source of the activity denoted in the Activity Type Code field.
Activity Source Description Text Example: Visible from CSO	ActivitySourceDetail /ActivitySourceDesc riptionText	STRING	N	255	BEACH_ACTIVITY_REAS ON.DESCRIPTION (BEACH_ACTIVITY_REAS ON.CLASS = 'SOURCE')	The Beach Activity Source Type field is used to supply additional information regarding the source of the activity denoted in the Activity Type Code field.



Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Activity Indicator Type  Example: PREEMPT	ActivityIndicatorDet ail/ActivityIndicator Type	STRING	Y	60	BEACH_ACTIVITY_REAS ON.TYPE (BEACH_ACTIVITY_REAS ON.CLASS = 'INDICATOR')	This value must be set to one of the following:  PREEMPT (Preemptive)  ENTERO (Enterococci)  TOTAL_COL (Total Coliform)  FECAL_COL (Fecal Coliform)  ECOLI (E. coli)  RATIO (Total/Fecal Ratio)  OTHER (Other-Please specify in the Description field)  This value is required only if beach activity information AND beach activity indicator information is included in the XML data file.  The Beach Activity Indicator Type field is used to supply information regarding the indicator for the activity denoted in the Activity Type Code field.
Activity Indicator Description Text Example: To avoid more actions	ActivityIndicatorDet ail/ActivityIndicator DescriptionText	STRING	N	255	BEACH_ACTIVITY_REAS ON.DESCRIPTION (BEACH_ACTIVITY_REAS ON.CLASS = 'INDICATOR')	This value is required only if beach activity information AND beach activity indicator information is included in the XML data file.
Activity Monitoring Station ID  Example: 21MEBCH/Stati on1	ActivityMonitoringS tationIdentifier	STRING	N	65	BEACH_ACTIVITY_STATI ON.STATION_ID	This value corresponds to the combination of a valid, pre-registered STORET organization ID and the valid, pre-registered STORET station ID that impacted the activity.  The two IDs must be joined together with a "pipe" (" ") character (e.g., 'OrgID StationID').  Any number of Monitoring Station IDs may be submitted (consecutively in the XML file) to associate many stations to a single activity.  This value is required if the Activity Reason Type is 'ELEV_BACT'.



Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Activity Description Text  Example: The lifeguards closed the beach	ActivityDescriptionT ext	STRING	N	255	BEACH_ACTIVITY.DESCR IPTION	This is an optional field that can be used to describe anything about the activity itself. An example might be, "The lifeguards closed the beach."
Activity Comment Text  Example: The police were not present	ActivityCommentTe xt	STRING	N	255	BEACH_ACTIVITY.COMM ENT	This is an optional field that can be used to store other information about the particular activity. An example might be, "The police were not present."
Activity Start Measure  Example: 2	ActivityExtentDetail/ ActivityExtentStart Measure	NUMBE R	N	14	BEACH_ACTIVITY.EXTEN T_START_MEASURE	This value is the numeric equivalent of the location or mile marker where the length of affected beach begins. The activity extent length (below) is added to the activity start measure to understand the exact extent of beach that was affected by the activity.  For example, a start measure of 2 with an extent length of 5 and a unit of measure code of mi means the activity affected the beach from mile marker 2
Activity Extent Length Measure Example: 5	ActivityExtentDetail/ ActivityExtentLengt hMeasure	NUMBE R	Y	14	BEACH_ACTIVITY.EXTEN T_LENGTH	to mile marker 7.  This value is required only if any beach activity information AND any beach activity extent information is included in the XML data file.  See Activity Start Measure (above) for an explanation of the use of this value.
Activity Unit of Measure Code Example: MI	ActivityExtentDetail/ ActivityUnitOfMeas ureCode	STRING	Y	12	BEACH_ACTIVITY.EXTEN T_UNIT_OF_MEASURE	This value must be set to one of the following:  MI (Miles) FT (Feet) YDS (Yards) M (Meters) KM (Kilometers) This value is required only if any beach activity information AND any beach activity extent information is included in the XML data file.



### 3.1.6 Beach Role Information

The beach role section of the XML submission allows submitting states to provide data related to the Organization and/or Person performing roles for a given beach. This section includes data elements, such as beach role type code, organization identifier, and person identifier. These data elements will be included in the XML file when beach role information needs to be added or updated in the PRAWN database.

All XML elements in this section are located in the following position on the XML element hierarchy—"BeachDataSubmission/BeachDetail/BeachRoleDetail/".

Data (Y/N) Type
-----------------



Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Beach Role Type Code Example:	BeachRoleTypeCode	STRING	Y	12	BEACH_ORGANIZATION_ ROLE_ASSIGN.ORG_ROLE _CODE,	People/organizations are assigned a role on a beach via the 'Beach Role Type Code' field.
LOCAL					BEACH_PERSON_ROLE_A SSIGN.PERSON_ROLE_CO DE	For beach/organization assignments, this value must be set to one of the following:
						<ul> <li>LOCAL (Lead Local Agency)</li> <li>STATE (Lead State Agency)</li> <li>CONTRACTOR (Contractor)</li> <li>SUBCONTRACT (Subcontractor)</li> <li>RESPONDENT (Respondent)</li> <li>DETERM_AUTH (Determination Authority)</li> <li>ISSUAN_AUTH (Issuance Authority)</li> <li>REOPEN_AUTH (Reopening Authority)</li> <li>LAB (Laboratory)</li> <li>COLLECTOR (Sample Collector)</li> <li>ANALYZER (Sample Analyzer)</li> <li>OTHER (Other)</li> <li>UNKNOWN (Unknown)</li> <li>For beach/person assignments, this value must be set to one of the following:</li> </ul>
						<ul> <li>STATE (Lead State Contact)</li> <li>LOCAL (Lead Local Contact)</li> <li>COLLECTOR (Sample Collector)</li> <li>ANALYZER (Sample Analyzer)</li> <li>RESPONDENT (Respondent)</li> <li>TECHNICAL (Technical Contact)</li> <li>PUBLIC (Public Contact)</li> <li>DETERM_AUTH (Determination Authority)</li> <li>ISSUAN_AUTH (Issuance Authority)</li> <li>REOPEN_AUTH (Reopening Authority)</li> <li>INFO_TECH (Information Technology Authority)</li> <li>This value is required if any beach role</li> </ul>
						This value is required if any beach role information is included in the XML data file.



Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Beach Role Organization Identifier	BeachRoleOrganizati onIdentifier	STRING	Y	12	BEACH_ORGANIZATION_ ROLE_ASSIGN.FK_ORGAN IZATION_ID, PERSON.FK_ORGANIZATI	A beach is associated with an organization via this field. To do so, enter the Organization Identifier in the Beach Role Organization Identifier
Example: 987654321098					ON_ID	field.
707034321070						This value must correspond to a valid Organization Identifier in the XML file or in the PRAWN database.
Beach Role Person Identifier	BeachRolePersonIde ntifier	STRING	N	12	BEACH_PERSON_ROLE_A SIGN.FK_PERSON_ID	A beach can be associated with a person via this field. To do so, enter the Person
Example: 123456789012				SIGNA K_I EKSON_ID		Identifier in the Beach Role Person Identifier field in addition to entering the Organization Identifier in the Beach Role Organization Identifier field.
						The Beach Role Person Identifier must correspond to a valid Person Identifier in the XML file or in the PRAWN database.
Beach Role BeachRoleEffective DATE Y Effective Date		BEACH_ORGANIZATION_ ROLE_ASSIGN.EFFECTIVE _DATE,	This value is required if any beach role information is included in the XML data file.			
Example: 2003- 01-01T00:00:00					BEACH_PERSON_ROLE_A SSIGN.EFFECTIVE_DATE	The date should be entered in the XML file in the following format: <i>YYYY-MM-DDTHH:MI:SS</i>
						This value should be set to the date on which the beach role information became effective or will become effective.
						Please see Section 3.2 Use of Effective Date and Status Indicator Data Elements for more information.
Beach Role Status Indicator	BeachRoleStatusIndi cator	STRING	Y	8	BEACH_ORGANIZATION_ ROLE_ASSIGN.STATUS,	This value is required if any beach role information is included in the XML data
Example:					BEACH_PERSON_ROLE_A SSIGN.STATUS	file.  This value must be set to "ACTIVE" or
ACTIVE						This value must be set to "ACTIVE" or "INACTIVE".
						Please see Section 3.2 Use of Effective Date and Status Indicator Data Elements for more information.

## **3.1.7** Year Completion Indicators

The Year Completion Indicators section of the XML submission allows submitting states to notify the EPA when they have finished submissions for the year. This section includes data elements, such as



Notification Data Complete Indicator, Monitoring Data Complete Indicator, and Location Data Complete Indicator. These data elements will be included in the XML file when states wish to notify that the EPA that they have finished submitting data for the year.

NOTE: To generate a submission with the Notification Access database with year completion information, you must use the End Of Year Submission Generation form. There are no tables to fill out to generate this submission.

All XML elements in this section are located in the following position on the XML element hierarchy—"BeachDataSubmission/YearCompletionIndicators/".

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Completion Year Example: 2007	CompletionYear	NUMBE R	N	4	N/A	This value is required if any year completion data is included in the XML data file.
Example. 2007						This value indicates what year the data has been submitted for.
						This can be created using the End Of Year Submission Generation form.
Notification Data Completion	NotificationDataCo mpletionIndicator	BOOLE AN	N	N/A	N/A	This value indicates whether or not the Notification data has all been submitted for the calendar year.
Indicator						This can be created using the End Of
Example: Y						Year Submission Generation form.
Monitoring Data Completion Indicator	MonitoringDataCom pletionIndicator	BOOLE AN	N	N/A	N/A	This value indicates whether or not the Monitoring data has all been submitted for the calendar year.
Example: Y						This can be created using the End Of Year Submission Generation form.
Location Data Completion Indicator	LocationDataComple tionIndicator	BOOLE AN	N	N/A	N/A	This value indicates whether or not the Location data has all been submitted for the calendar year.
Example: Y						This can be created using the End Of Year Submission Generation form.

### 3.1.8 Beach Procedure Information

The beach procedure section of the XML submission contains data related to the procedures used by beaches for monitoring, notification, issuance, and reopening. This section includes data elements, such as procedure type code, procedure description text, and procedure identifier. These data elements will be included in the XML file when beach procedure information needs to be added or updated in the PRAWN database.



All XML elements in this section are located in the following position on the XML element hierarchy—"BeachDataSubmission/BeachDetail/BeachProcedureDetail/".

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Procedure Type Code Example:	ProcedureTypeCode	STRING	Y	12	PROCEDURE.PROCEDURE _CODE	This value must be set to a valid procedure type code. See Appendix C Procedure Type Codes for a list of valid codes.
IA_RADIO						This value is required if any beach procedure information is included in the XML data file.
Procedure Description Text Example: Announce the advisory on the local radio station	ProcedureDescriptio nText	STRING	Y	255	PROCEDURE.DESCRIPTIO N	This value is required if any beach procedure information is included in the XML data file.
Procedure Identifier Example: 675849302019	ProcedureIdentifier	STRING	Y	12	PROCEDURE.ID	Submitting organizations will need to maintain a list of valid Procedure Identifiers for all procedures that are stored in the PRAWN database. These identifiers must be unique within each organization, as they will be used to update organization-level data. (For example, with an organization there can only be 1 procedure identified as "AB123", but there could be another procedure identified as "AB123" in another organization.)
Procedure Beach Identifier Example: ME234898	ProcedureBeachIdent ifier	STRING	Y	12	BEACH_PROCEDURE_ASS IGN.FK_BEACH_ID	This value must correspond to EITHER a valid Beach Identifier and/or a valid Program Interest Identifier in the XML file or in the PRAWN database.  Any number of Procedure Beach Identifiers may be submitted (consecutively in the XML file) to associate many beaches and/or program interests to a single procedure.

### 3.1.9 Header Information

The header information section of the XML file contains information regarding the data submission, such as submission date, submitting user, and submitting agency. **These keys should not be included in the** 



**XML file submitted by the submitting agency.** Instead, once an XML file has been successfully submitted to CDX, these XML keys will be added to the file by the CDX web application.

All XML elements in this section are located in the following position on the XML element hierarchy—"BeachDataSubmission/HeaderDetail/".

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Access Table Mapping	Comment
Submitting Agency	SubmittingAgencyIdentifier	STRING	Y	12		This key will be inserted into the file by the CDX web application.
Identifier  Example:  KYDEP						The list of valid Submitting Agency Identifiers will be maintained as part of the CDX registration process.
Submitting User Identifier	SubmittingUserIdentifier	STRING	Y	12		This key will be inserted into the file by the CDX web application.
Example: BSMITH						The list of valid Submitting User Identifiers will be maintained as part of the CDX registration process.
Submission Identifier	SubmissionIdentifier	STRING	Y	12		This key will be inserted into the file by the CDX web application.
Example: 111111111111						This value will uniquely identify each submission and will be generated by the CDX web application.
Submission Date	Submission Date	DATE	Y			This key will be inserted into the file by the CDX web application.
Example: 2003- 01-01T00:00:00						The date should be entered in the XML file in the following format: YYYY-MM-DDTHH:MI:SS

### 3.2 Use of Effective Date and Status Indicator Data Elements

The Effective Date and Status Indicator data elements are used to set the effective dates in the PRAWN database for mailing addresses, electronic addresses, telephone numbers, beach/person roles, and beach/organization roles. For each of these types of data, the PRAWN database tracks the Start Date and Stop Date. For example, the database may track that a fax telephone number was valid starting on January 1, 2001. If this telephone number was updated and the new fax number was valid on July 1, 2001, a new record is added in the database with a Start Date of July 1, 2001 and the same date is added as the Stop Date for the previous telephone number.

To set this information correctly, the XML schema uses two data elements—Effective Date and Status Indicator—with mailing address, electronic address, telephone, beach/person role, and beach/organization role data. Furthermore, the user must specify the appropriate Type Code value (e.g., "FAX", VOICE",



etc. for telephone number) so that the correct address, telephone number, beach/person role, or beach/organization role is updated.

To update these types of data, these three data elements should be populated as follows:

- To update an address, electronic address, telephone number, beach/person role assignment, or beach/organization assignment, the Effective Date and Status Indicator fields should be set as follows:
  - Effective Date should be set to the date on which the new address, telephone number, or assignment will become valid.
  - Status Indicator should be set to "ACTIVE".
  - Type Code should be set to the type of information to be updated. (For example, this might be set to "STATE" for BeachRoleTypeCode.)
  - This will update the Stop Date for the current data and will create a new record with the updated data and the associated Start Date.
- To indicate that an address, electronic address, telephone number, beach/person role assignment, or beach/organization assignment is no longer valid and there is no replacement data, the Effective Date and Status Indicator fields should be set as follows:
  - Effective Date should be set to the date on which the address, telephone number, or assignment will become invalid.
  - Status Indicator should be set to "INACTIVE".
  - Type Code should be set to the type of information to be updated. (For example, this might be set to "SHIPPING" for MailingAddressTypeCode.)
  - This will update the Stop Date for the current data but will not create a new record, since there is no new data.



# 4 How to Decode the Error Messages

**IMPORTANT NOTE**: This chapter has not yet been update from the August 2006 version. It will be updated in late November or December 2007.

This chapter provides detailed information regarding the error messages that may be produced during data transfer. This chapter assumes that the XML submission has passed XML schema validation before being processed by the data loading software.

## 4.1 System Generated Error Messages

This section describes system generated error messages associated with the validation and loading of National Beach Program data to the PRAWN database. The following table details the specific error codes and messages that may be produced during data loading and provides a short description of each error and appropriate corrective actions. It should be noted that error messages will be followed by XML tag value(s) to describe the location in the XML document where the error occurred. For instance, the error message 'OrganizationName is required for adding/editing an Organization' would be followed by the text '[OrganizationIdentifier = X]' where 'X' is the identifier for the Organization where the error occurred.

All errors encountered during the processing and loading of an XML data submission will be written to an Error Log File that can be sent to CDX and used for reporting feedback to data submitters. In addition to PRAWN system generated errors, Oracle specific error messages will also be written to this file (see Section 4.2 for more information).

#### Exhibit 2 PRAWN Error Messages

Error Code	Error Message	Description/Corrective Action
BCH-0101	OrganizationIdentifier must be unique for adding an Organization to the PRAWN system. [OrganizationIdentifier = 'X']	All new Organization records must have a previously unused value for Organization Identifier in the PRAWN system. Confirm that you are using the assigned OrganizationIdentifier.
BCH-0102	OrganizationIdentifier not found in the PRAWN system. [OrganizationIdentifier = 'X']	You are attempting to edit a record that does not exist.  Please confirm that you have entered the correct  Organization Identifier for the record you are attempting to edit or change OrganizationTransactionType to add if you wish to create a new Organization record.
BCH-0103	OrganizationTypeCode is invalid. [OrganizationIdentifier = 'X'; OrganizationTypeCode ='X']	A value unknown to the PRAWN system has been submitted for OrganizationTypeCode. Please see Chapter 3 for a list of valid values.



Error Code	Error Message	Description/Corrective Action
BCH-0201	PersonIdentifier must be unique within an Organization. [OrganizationIdentifier = 'X'; PersonIdentifier = 'X']	All new Person records must have a value for Person Identifier that is previously unused by the referenced Organization in the PRAWN system.
BCH-0202	PersonIdentifier not found within the specified Organization. [OrganizationIdentifier = 'X'; PersonIdentifier = 'X']	You are attempting to edit a record that does not exist within the specified Organization. Please confirm that you have entered the correct Person Identifier for the record you are attempting to edit or change PersonTransactionType to add if you wish to create a new Person record.
BCH-0301	MailingAddressTypeCode is invalid. [OrganizationIdentifier = 'X'; MailingAddressTypeCode = 'X']	A value unknown to the PRAWN system has been submitted for MailingAddressTypeCode. Please see Chapter 3 for a list of valid values.
BCH-0302	MailingAddressStateCode is invalid. [OrganizationIdentifier = 'X'; MailingAddressStateCode = 'X']	MailingAddressStateCode must be a valid 2-digit State Postal Code (such as CA for California). Confirm that you are using a valid state code.
BCH-0303	MailingAddressZipCode is invalid. [OrganizationIdentifier = 'X'; MailingAddressZipCode = 'X']	Provide a MailingAddressZipCode in one of the following numeric formats: #####  or ############################
BCH-0401	ElectronicAddressTypeCode is invalid. [OrganizationIdentifier = 'X'; ElectronicAddressTypeCode = 'X']	A value unknown to the PRAWN system has been submitted for ElectronicAddressTypeCode. Please see Chapter 3 for a list of valid values.
BCH-0501	TelephoneNumber is invalid. [OrganizationIdentifier = 'X'; TelephoneNumber = 'X']	Provide a TelephoneNumber in one of the following alphanumeric formats:  XXX-XXX-XXXX
BCH-0502	TelephoneTypeCode is invalid. [OrganizationIdentifier = 'X'; TelephoneTypeCode = 'X']	A value unknown to the PRAWN system has been submitted for TelephoneTypeCode. Please see Chapter 3 for a list of valid values.
BCH-0601	ProgramInterestStateCode is invalid. [BeachIdentifier = 'X'; ProgramInterestStateCode = 'X']	ProgramInterestStateCode must be a valid 2-digit State Postal Code (such as CA for California). Confirm that you are using a valid state code.
BCH-0602	BeachIdentifier must be unique for adding a Beach to the PRAWN system.  [BeachIdentifier = 'X']	All new Beach records must have a previously unused value for Beach Identifier in the PRAWN system. Confirm that you are using the assigned 8-digit BeachIdentifier.
BCH-0603	BeachIdentifier registered but not previously submitted to the PRAWN system.  [BeachIdentifier = 'X'; BeachNameTransactionTypeCode = 'X']	You are attempting to edit a record that does not exist.  Please confirm that you have entered the correct Beach Identifier for the record you are attempting to edit or change Beach Transaction Type Code to add if you wish to create a new Beach record.



Error Code	Error Message	Description/Corrective Action
BCH-0604	BeachIdentifier not registered with EPA. [BeachIdentifier = 'X']	You are attempting to submit notification data for a beach with an identifier that has not been assigned by EPA.  Contact your EPA beach coordinator for the appropriate beach identifier.
BCH-0605	ProgramInterestFIPSCountyCode is invalid. [BeachIdentifier = 'X'; ProgramInterestFIPSCountyCode = 'X']	ProgramInterestFIPSCountyCode must be valid 5-digit FIPS County Code. Confirm that you are using a valid code, and that it matches the two letter State code submitted as ProgramInterestStateCode.
BCH-0606	WaterBodyNameCode cannot be combined with WaterBodyTypeCode. [BeachIdentifier = 'X'; WaterBodyNameCode = 'X'; WaterBodyTypeCode = 'X']	The Waterbody Name Code submitted for the beach must correspond to an acceptable Waterbody Type Code. Please see Chapter 3 for acceptable matches (e.g., a Name of INLAND may only have a Type of STILL_WATER or FLOW_WATER). Note that this error code is no longer in use.
BCH-0607	Beach Extent/Swim Season/Monitoring Frequencies already defined for the year on beach. [BeachIdentifier = 'X'; AttributeEffectiveYear = 'X']	The Beach Attribute information (Beach Extent/Swim Season/Monitoring Frequencies/Beach Tier/Pollution Source) you have submitted already exists for that particular beach, for that particular year. Please either revise the Attribute Effective Date to the appropriate year, or contact the EPA Beach program manager to ensure the proper information is stored in the PRAWN system.
BCH-0701	ActivityTypeCode is invalid. [BeachIdentifier = 'X'; ActivityName = 'X'; ActivityTypeCode = 'X']	A value unknown to the PRAWN system has been submitted for ActivityTypeCode. Please see Appendix B for a list of valid values.
BCH-0702	ActivityMonitoringStationIdentifer not found in the STORET system. [BeachIdentifier = 'X'; ActivityName = 'X'; ActivityMonitoringStationIdentifier = 'X']	You are attempting to submit a monitoring station ID that has not been registered with STORET. Check the validity of the Station ID and if valid, ensure is has been registered as a monitoring station in STORET. Contact your EPA beach coordinator for further information.
BCH-0703	Activities with elevated bacteria (ELEV_BACT) as reasons must have at least one valid STORET Station ID.  [BeachIdentifier = 'X'; ActivityName = 'X']	You are attempting to report a notification activity based on elevated bacteria levels without submitting a valid STORET Station ID. Each activity with a Reason Type Code of 'ELEV_BACT' must have at least one Monitoring Station ID.
BCH-0704	Activity Reason/Source/Indicator Description must be included if Activity Reason/Source/Indicator Code is OTHER. [BeachIdentifier = 'X'; ActivityName = 'X']	You are attempting to submit either a Reason, a Source, or an Indicator for an activity labeled with type 'OTHER' without submitting a description for the Reason, Source, or Indicator.
BCH-0705	ActivityActualStartDate year does not match year of ActivityActualStopDate. [BeachIdentifier = 'X'; ActivityName = 'X'; ActivityActualStartDate = 'X'; ActivityActualStopDate = 'X']	You are attempting to submit an Activity that is spanning multiple years. Activities may only be submitted for one year at a time. Should an activity actually go on for more than one year, it is required that the initial activity end on December 31 <sup>st</sup> 11:59:59pm of the current year and a new activity start again on January 1 <sup>st</sup> 12:00:00am of the next year.



Error Code	Error Message	Description/Corrective Action
BCH-0706	ActivityActualStopDate occurs prior to ActivityActualStartDate. [BeachIdentifier = 'X'; ActivityName = 'X'; ActivityActualStartDate = 'X'; ActivityActualStopDate = 'X']	You are attempting to submit an Activity whose stop date occurred before it was started. Please correct the dates so the stop date is after the start date.
BCH-0801	BeachRoleTypeCode is invalid. [BeachIdentifier = 'X'; BeachRoleOrganizationIdentifier = 'X'; BeachRoleTypeCode = 'X']	A value unknown to the PRAWN system has been submitted for BeachRoleTypeCode. Please see Chapter 3 for a list of valid values.
BCH-0802	BeachRoleOrganizationIdentifier not found in the PRAWN system. [BeachIdentifier = 'X'; BeachRoleOrganizationIdentifier = 'X']	You are attempting to associate a role with an Organization that does not exist in the PRAWN system. Please confirm that you have entered the correct Organization Identifier and that the information for that Organization has been previously submitted and successfully processed by the PRAWN system.
BCH-0803	BeachRolePersonIdentifier not found in the PRAWN system. [BeachIdentifier = 'X'; BeachRoleOrganizationIdentifier = 'X'; BeachRolePersonIdentifier = 'X']	You are attempting to associate a role with a person that does not exist in the PRAWN system. Please confirm that you have entered the correct Person Identifier and that the information for that Person has been previously submitted and successfully processed by the PRAWN system.
BCH-0804	BeachRolePersonIdentifiercannot be assigned a role on a beach without a role assignment for the person's parent organization on the same beach. [BeachIdentifier = 'X'; BeachRoleOrganizationIdentifier = 'X'; BeachRolePersonIdentifier = 'X']	You are attempting to associate a Person with a Beach without having associated that Person's Organization to the beach. Please check that the Organization Role Information precedes the Person Role Information in the XML file.
BCH-0901	ProcedureIdentifier must be unique for adding a Procedure to the PRAWN system.  [ProcedureIdentifier = 'X']	All new Procedure records must have a value for Procedure Identifier that is previously unused by the referenced Organization in the PRAWN system.
		To update an existing Procedure, including assigning more beaches to the Procedure, change the ProcedureTypeCode to 'EDIT'.
BCH-0902	ProcedureIdentifier not found in the PRAWN system. [ProcedureIdentifier = 'X']	You are attempting to edit a record that does not exist.  Please confirm that you have entered the correct Procedure Identifier for the record you are attempting to edit or change ProcedureTransactionType to add if you wish to create a new Procedure record.
BCH-0903	ProcedureTypeCode is invalid. [ProcedureIdentifier = 'X'; ProcedureTypeCode = 'X']	A value unknown to the PRAWN system has been submitted for ProcedureTypeCode. Please see Appendix C Procedure Type Codes for a list of valid values.
BCH-0904	ProcedureBeachIdentifier not found in the PRAWN system. [ProcedureIdentifier = 'X'; ProcedureBeachIdentifier = 'X']	You are attempting to associate a procedure with a beach that does not exist in the PRAWN system. Please confirm that you have entered the correct Beach Identifier and that the information for that Beach has been previously submitted and successfully processed by the PRAWN system.



# 4.2 Common Causes of Error Messages

When troubleshooting an error log returned by the PRAWN system, please refer to the following chart for help with some of the most common errors (full-text error messages can be found in section 4.1). If the error is not resolved following the suggestions below, please contact eBeaches@cgifederal.com.

Error Code	Troubleshooting Tip	Page(s)
BCH-0101	Please check the value of the OrganizationNameTransactionTypeCode tag (ORGANIZATION.TRANSACTION in the Notification Access Database). Generally, this error occurs if the related OrganizationId already exists in PRAWN and has been submitted with an OrganizationNameTransactionTypeCode of ADD.	Error! Bookmark not defined.
BCH-0102	Please check the value of the OrganizationNameTransactionTypeCode tag (ORGANIZATION.TRANSACTION in the Notification Access Database). Generally, this error occurs if the related OrganizationId does not yet exist in PRAWN and has been submitted with an OrganizationNameTransactionTypeCode of EDIT.	Error! Bookmark not defined.
BCH-0103	Please check the value of the OrganizationTypeCode tag (ORGANIZATION.ORGANIZATION_CODE in the Notification Access Database). Generally, this error is the result of a misspelling in of one of the valid values used to indicate Organization Type (most often 'STATE_AGENCY' is input instead of 'STATE_AGNCY', which is the correct value). Please see Chapter 3 for additional information.	3-2
BCH-0201	Please check the value of the PersonNameTransactionTypeCode tag (PERSON.TRANSACTION in the Notification Access Database). Generally, this error occurs if the related PersonId already exists in PRAWN and has been submitted with an PersonNameTransactionTypeCode of ADD.	Error! Bookmark not defined.
BCH-0202	Please check the value of the PersonNameTransactionTypeCode tag (PERSON.TRANSACTION in the Notification Access Database). Generally, this error occurs if the related PersonId does not yet exist in PRAWN and has been submitted with an PersonNameTransactionTypeCode of EDIT.	Error! Bookmark not defined.
BCH-0301	Please check the value of the MailingAddressTypeCode tag (MAILING_ADDRESS.MAILING_ADDRESS_CODE in the Notification Access Database). Generally, this error is the result of a misspelling in of one of the valid values used to indicate Mailing Address Type. Please see Chapter 3 for additional information.	3-3, 3-8
BCH-0302	Please check the value of the MailingAddressStateCode tag (MAILING_ADDRESS.STATE_POSTAL_CODE in the Notification Access Database). Generally, this error is the result of a misspelling in of one of the valid values used to indicate the correct state. Please confirm that a valid state code is being used.	3-4, 3-9
BCH-0303	Please check the value of the MailingAddressZipCode tag (MAILING_ADDRESS.ZIP_CODE in the Notification Access Database). Generally, this error is the result of an incorrectly formatted Zip Code. The correct formats are either '#####' (ZIP) or '#####-####' (ZIP+4). Please see Chapter 3 for additional information.	3-4, 3-9



Error Code	Troubleshooting Tip	Page(s)
BCH-0401	Please check the value of the ElectronicAddressTypeCode tag (ELECTRONIC_ADDRESS.ELECTRONIC_ADDRESS_CODE in the Notification Access Database). Generally, this error is the result of a misspelling in of one of the valid values used to indicate Electronic Address Type Please see Chapter 3 for additional information.	3-5, 3-10
BCH-0501	Please check the value of the TelephoneNumber tag (TELEPHONE.TELEPHONE_NUMBER in the Notification Access Database). Generally, this error is the result of an incorrectly formatted telephone number. The correct format is 'XXX-XXX-XXXX'. Please see Chapter 3 for additional information.	3-6, 3-11
BCH-0502	Please check the value of the TelephoneTypeCode tag (TELEPHONE.TELEPHONE_CODE in the Notification Access Database). Generally, this error is the result of a misspelling in of one of the valid values used to indicate Telephone Type. Please see Chapter 3 for additional information.	3-6, 3-11
BCH-0601	Please check the value of the ProgramInterestStateCode tag (BEACH.STATE_POSTAL_CODE in the Notification Access Database). Generally, this error is the result of a misspelling in of one of the valid values used to indicate the correct state. Please confirm that a valid state code is being used.	3-13
BCH-0602	Please check the value of the BeachNameTransactionTypeCode tag (BEACH.TRANSACTION in the Notification Access Database). Generally, this error occurs if the related BeachId already exists in PRAWN and has been submitted with a BeachNameTransactionTypeCode of ADD.	Error! Bookmark not defined.
BCH-0603	Please check the value of the BeachNameTransactionTypeCode tag (BEACH.TRANSACTION in the Notification Access Database). Generally, this error occurs if the related BeachId has been registered with the EPA, but has not yet been submitted to PRAWN, and has been submitted with a BeachNameTransactionTypeCode of EDIT.	Error! Bookmark not defined.
BCH-0604	Please check the value of the BeachIdentifier tag (BEACH.ID in the Notification Access Database). Generally, this error occurs if the related BeachId has not yet been registered with the EPA, or has been misspelled in the submission.	3-12
BCH-0605	Please check the value of the ProgramInterestFIPSCountyCode tag (BEACH.FIPS_COUNTY in the Notification Access Database). Generally, this error is the result of a misspelling in the standard 5-digit FIPS County Code. Please confirm that the correct FIPS Code is being used.	3-13
BCH-0606	This error code is no longer in use. Please contact eBeaches@cgifederal.com if this error code appears	N/A
BCH-0607	Please check the value of the appropriate tag: ExtentLengthMeasure (BEACH_ATTRIBUTE.EXTENT_LENGTH in the Notification Access Database), SwimSeasonLengthMeasure (BEACH_ATTRIBUTE.SWIM_SEASON_LENGTH in the Notification Access Database), SwimSeasonFrequencyMeasure (BEACH_ATTRIBUTE.SWIM_MONITOR_FREQ in the Notification Access Database), OffSeasonFrequencyMeasure (BEACH_ATTRIBUTE.OFF_MONITOR_FREQ in the Notification Access Database) for the related year (AttributeEffectiveYear, BEACH_ATTRIBUTE.EFFECTIVE_YEAR in the Notification Access Database). Beach Attribute data (Beach Extent/Swim Season/Monitoring Frequencies) has already been submitted for this calendar year. If this is incorrect, or you have questions, please contact eBeaches@cgifederal.com.	3-15, 3-16, 3- 17



Error Code	Troubleshooting Tip	Page(s)		
BCH-0701	Please check the value of the ActivityTypeCode tag (BEACH_ACTIVITY.ACTIVITY_CODE in the Notification Access Database). Generally, this error is the result of a misspelling in of one of the valid values used to indicate Activity Type. Please check Chapter 3 and Appendix B in the Beach Notification Data User Guide for additional information.			
BCH-0702	Please check the value of the ActivityMonitoringStationIdentifier tag (BEACH_ACTIVITY_STATION.STATION_ID in the Notification Access Database). Generally, this error occurs if the related StationId has not been properly formatted ("OrgId StationId"), has not yet been registered with STORET, or has been misspelled in the submission.	3-25		
BCH-0703	Please check the value of the ActivityMonitoringStationIdentifier tag (BEACH_ACTIVITY_STATION.STATION_ID in the Notification Access Database). Generally, this error occurs if the related StationId has been omitted, but has also been known to occur if a BCH-0702 error (incorrectly formatted StationId) has occurred in the same submission.			
BCH-0704	If the ActivityReasonType (BEACH_ACTIVITY_REASON.TYPE in the Notification Access Database where BEACH_ACTIVITY_REASON.CLASS = Reason), ActivitySourceType (BEACH_ACTIVITY_REASON.TYPE in the Notification Access Database where BEACH_ACTIVITY_REASON.CLASS = Source), or ActivityIndicatorType (BEACH_ACTIVITY_REASON.TYPE in the Notification Access Database where BEACH_ACTIVITY_REASON.CLASS = Indicator) are equal to OTHER, the corresponding description field must be filled in.			
BCH-0705	The ActivityActualStartDate (BEACH_ACTIVITY.ACTUAL_START_DATE in the Notification Access Database) year does not match the ActivityActualStopDate ( in the Notification Access Database) year. Activities can only occur during one calendar year. In the event that an event does cross into another year, it must be split into two activities, one for each year.	3-22		
BCH-0706	ActivityActualStartDate (BEACH_ACTIVITY.ACTUAL_START_DATE in the Notification Access Database) occurs after the ActivityActualStopDate ( in the Notification Access Database). The order of these dates must be reversed in order to achieve a successful submission.	3-22		
BCH-0801	Please check the value of the BeachRoleTypeCode tag (BEACH_ORGANIZATION_ROLE_ASSIGN.ORG_ROLE_CODE and BEACH_PERSON_ROLE_ASSIGN.PERSON_ROLE_CODE in the Notification Access Database). Generally, this error is the result of a misspelling in of one of the valid values used to indicate Beach Role Type. Please check Chapter 3 in the Beach Notification Data User Guide for additional information.			
BCH-0802	Please check that the OrganizationIdentifier (ORGANIZATION.ID in the Notification Access Database) has already been submitted to PRAWN. Generally this error occurs if the Organization in question does not already exist in PRAWN, but has also been known to occur if BCH-0101, BCH-0102, and/or BCH-0103 errors (related OrganizationIds) have occurred in the same submission.	3-2		
BCH-0803	Please check that the PersonIdentifier (PERSON.ID in the Notification Access Database) has already been submitted to PRAWN. Generally this error occurs if the Person in question does not already exist in PRAWN, but has also been known to occur if BCH-0201 and/or BCH-0202 errors (related PersonIds) have occurred in the same submission.			



Error Code	Troubleshooting Tip	Page(s)
BCH-0804	Please check the order of the Organization and Person assignments on a given beach. Persons cannot be assigned a role on a beach until the Organization they belong to has been assigned a role on that beach.	3-29
BCH-0901	Please check the value of the ProcedureTransactionTypeCode tag (PROCEDURE.TRANSACTION in the Notification Access Database). Generally, this error occurs if the related ProcedureId already exists in PRAWN and has been submitted with an ProcedureTransactionTypeCode of ADD.	Error! Bookmark not defined.
BCH-0902	Please check the value of the ProcedureTransactionTypeCode tag (PROCEDURE.TRANSACTION in the Notification Access Database). Generally, this error occurs if the related OrganizationId does not yet exist in PRAWN and has been submitted with an ProcedureTransactionTypeCode of EDIT.	Error! Bookmark not defined.
BCH-0903	Please check the value of the ProcedureTypeCode tag (PROCEDURE.PROCEDURE_CODE in the Notification Access Database). Generally, this error is the result of a misspelling in of one of the valid values used to indicate Procedure Type. Please see Appendix C in the Beach Notification Data User Guide for additional information.	3-31
BCH-0904	Please check to be sure that the BeachId listed in the ProcedureBeachIdentifier tag (BEACH_PROCEDURE_ASSIGN.FK_BEACH_ID in the Notification Access Database) has been entered into PRAWN. Generally, this error occurs if the related BeachId has not yet been submitted to PRAWN, but an association between a procedure and the related BeachId has been submitted.	3-31

## 4.3 Oracle Generated Error Messages

In addition to error messages generated by the PRAWN system, it is also possible that Oracle specific errors may occur during XML processing. These errors would most likely be associated with the administration and maintenance of the Oracle database instance (for example, exceeding the allocated table space size). Oracle specific errors will be captured by the XML data loading software and reported in the Error Log File together with the PRAWN system generated errors (see Section 4.1 System Generated Error Messages). Oracle specific errors will be prefixed with the text 'Oracle Error:' and will contain the error message number and text produced by the Oracle database at the time the error occurred.

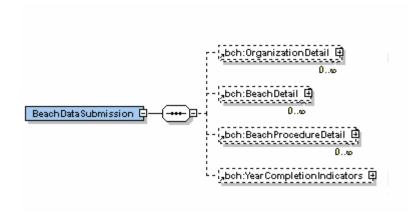


# 5 Appendix A Schema Graphics

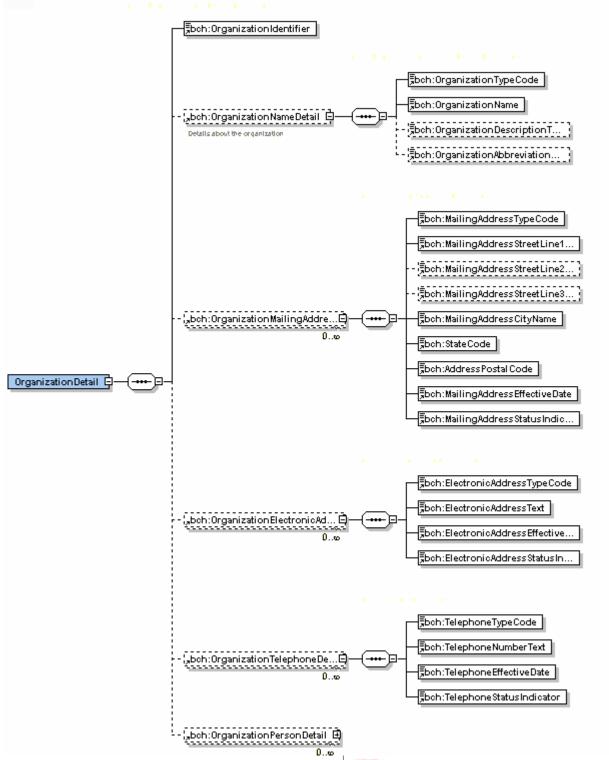
This appendix provides a graphical representation of the Beaches Notification v2.0 XML Schema. The figures that follow offer an expanded view of each of the four major sections that comprise a Beach Data Submission (Organization Detail, Person Detail, Beach Detail, and Beach Procedure Detail).

- Dashed lines represented optional elements, solid lines represent mandatory elements.
  - Please note: Empty tags (e.g., <BeachIdentifier></BeachIdentifier>) for optional elements cannot appear in the XML file.
- The figures 0..∞ and 1..∞ mean that the field may be repeated, as long as the repetitions are next to each other, as many times as the user wishes.
  - For example, a user may submit as many BeachDetail sections as necessary in a single file.
  - $1..\infty$  means that there must be at least one field included and  $0..\infty$  means the field is entirely optional.
- $\blacksquare$  A + sign at the end of the box means more elements exist under that element.

#### Exhibit 3 Beach Data Submission

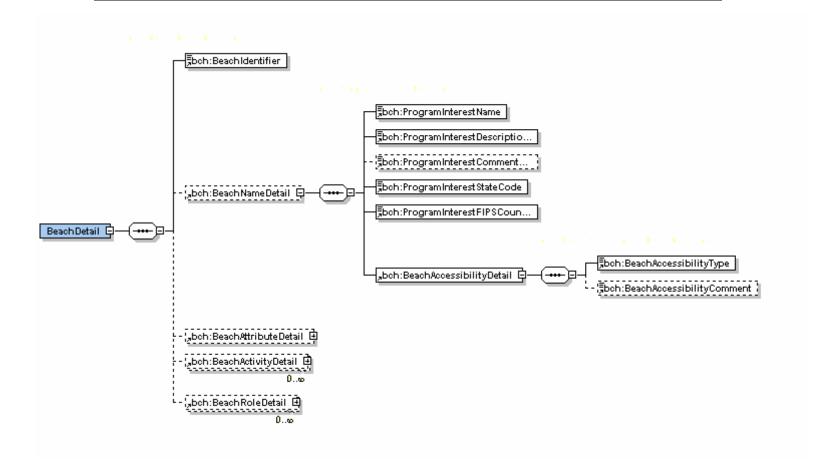




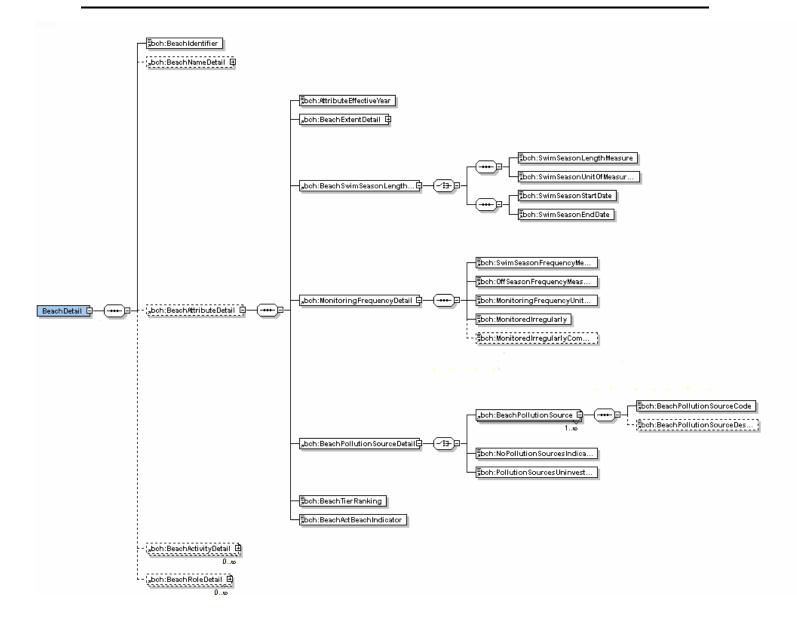




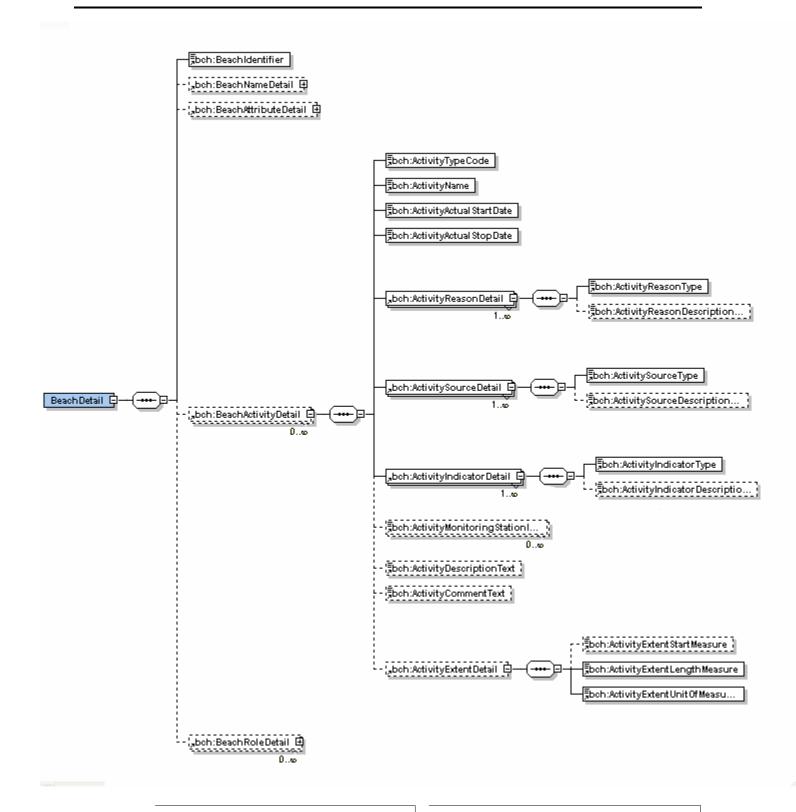














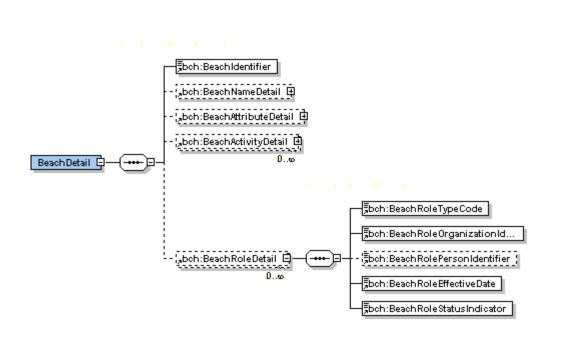
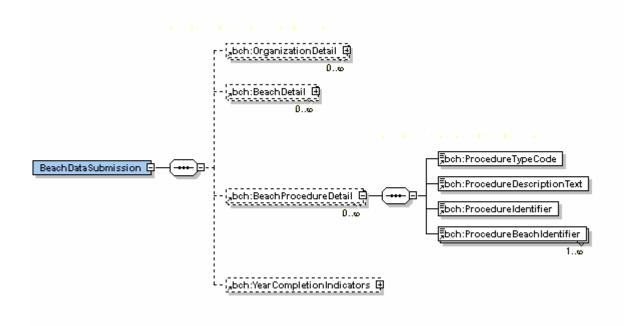
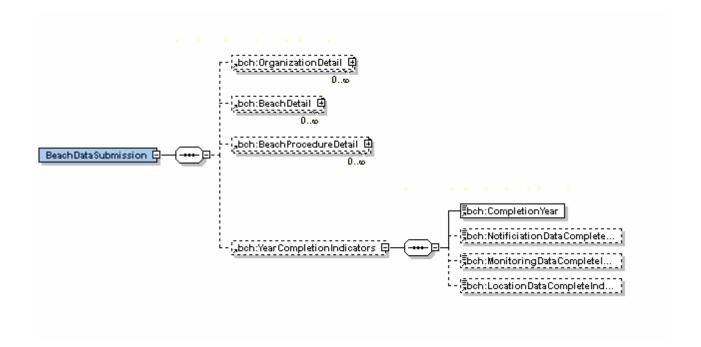


Exhibit 10 Beach Procedure Detail









# 6 Appendix B Example XML File

The following is text from an example XML file that would be sent to PRAWN from a State. The file appears with spacing to provide a more clear view of the data. The spacing is not required or standard.

```
<?xml version="1.0"?>
<BeachDataSubmission xsi:schemaLocation="http://www.exchangenetwork.net/schema/BEACHES/2 index.xsd"
xmlns="http://www.exchangenetwork.net/schema/BEACHES/2" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">
      <OrganizationDetail>
             <OrganizationIdentifier>2349fwe</OrganizationIdentifier>
             <OrganizationNameDetail>
                   <OrganizationTypeCode>PRIVATE</OrganizationTypeCode>
                   <OrganizationName>Tested</OrganizationName>
                   <OrganizationDescriptionText>Testeddesc</OrganizationDescriptionText>
                   <OrganizationAbbreviationText>TD</OrganizationAbbreviationText>
             </OrganizationNameDetail>
             <OrganizationMailingAddressDetail>
                   <MailingAddressTypeCode>MAILING</MailingAddressTypeCode>
                   <MailingAddressStreetLine1Text>123 Long Drive</MailingAddressStreetLine1Text>
                   <MailingAddressStreetLine2Text>Suite 534/MailingAddressStreetLine2Text>
                   <MailingAddressStreetLine3Text>The Last Stop</mailingAddressStreetLine3Text>
                   <MailingAddressCityName>Testerville</MailingAddressCityName>
                   <StateCode>VA</StateCode>
                   <AddressPostalCode>45387</AddressPostalCode>
                   <MailingAddressEffectiveDate>2002-05-05T12:00:00-05:00</mailingAddressEffectiveDate>
                   <MailingAddressStatusIndicator>ACTIVE</MailingAddressStatusIndicator>
             </OrganizationMailingAddressDetail>
             <OrganizationElectronicAddressDetail>
                   <ElectronicAddressTypeCode>EMAIL</ElectronicAddressTypeCode>
                   <ElectronicAddressText>my@my.com</ElectronicAddressText>
                   <ElectronicAddressEffectiveDate>2001-01-01T00:00:00</ElectronicAddressEffectiveDate>
                   <ElectronicAddressStatusIndicator>ACTIVE</ElectronicAddressStatusIndicator>
             </OrganizationElectronicAddressDetail>
             <OrganizationTelephoneDetail>
                   <TelephoneTypeCode>VOICE</TelephoneTypeCode>
```

<TelephoneNumberText>123-456-7890</TelephoneNumberText>

<TelephoneStatusIndicator>ACTIVE</TelephoneStatusIndicator>

<TelephoneEffectiveDate>2001-01-01T00:00:00-05:00</TelephoneEffectiveDate>



```
</OrganizationTelephoneDetail>
             <OrganizationPersonDetail>
                   <PersonIdentifier>9e8ef7</PersonIdentifier>
                   <PersonNameDetail>
                          <PersonStatusIndicator>ACTIVE</PersonStatusIndicator>
                          <FirstName>Johnny</FirstName>
                          <LastName>Jones</LastName>
                          <PersonMiddleInitial>J</PersonMiddleInitial>
                          <NameSuffixText>Jr</NameSuffixText>
                          <NamePrefixText>Mr.</NamePrefixText>
                   </PersonNameDetail>
                   <PersonMailingAddressDetail>
                          <MailingAddressTypeCode>MAILING</MailingAddressTypeCode>
                          <MailingAddressStreetLine1Text>830 My Drive</MailingAddressStreetLine1Text>
                          <MailingAddressStreetLine2Text>Suite 223</mailingAddressStreetLine2Text>
                          <MailingAddressStreetLine3Text>The last row</MailingAddressStreetLine3Text>
                          <MailingAddressCityName>The Big House</MailingAddressCityName>
                          <StateCode>VA</StateCode>
                          <AddressPostalCode>27886</AddressPostalCode>
                          <MailingAddressEffectiveDate>2001-01-01T12:00:00-
05:00</MailingAddressEffectiveDate>
                          <MailingAddressStatusIndicator>ACTIVE</MailingAddressStatusIndicator>
                   </PersonMailingAddressDetail>
                   <PersonElectronicAddressDetail>
                          <ElectronicAddressTypeCode>EMAIL</ElectronicAddressTypeCode>
                          <ElectronicAddressText>agnes.flemming@vdh.virginia.gov</ElectronicAddressText>
                          <ElectronicAddressEffectiveDate>2001-01-01T12:00:00-
05:00</ElectronicAddressEffectiveDate>
                          <ElectronicAddressStatusIndicator>ACTIVE</ElectronicAddressStatusIndicator>
                   </PersonElectronicAddressDetail>
                   <PersonTelephoneDetail>
                          <TelephoneTypeCode>VOICE</TelephoneTypeCode>
                          <TelephoneNumberText>617-254-0845</TelephoneNumberText>
                          <TelephoneEffectiveDate>2001-01-01T00:00:00</TelephoneEffectiveDate>
                          <TelephoneStatusIndicator>ACTIVE</TelephoneStatusIndicator>
                   </PersonTelephoneDetail>
             </OrganizationPersonDetail>
      </OrganizationDetail>
      <OrganizationDetail>
             <OrganizationIdentifier>394e785</OrganizationIdentifier>
             <OrganizationNameDetail>
```



```
<OrganizationTypeCode>LOCAL_GOV</OrganizationTypeCode>
                   <OrganizationName>testing</OrganizationName>
                   <OrganizationDescriptionText>testingdesc</OrganizationDescriptionText>
                   <OrganizationAbbreviationText>T</OrganizationAbbreviationText>
             </OrganizationNameDetail>
             <OrganizationPersonDetail>
                   <PersonIdentifier>foi34e0</PersonIdentifier>
                   <PersonNameDetail>
                          <PersonStatusIndicator>ACTIVE</PersonStatusIndicator>
                          <FirstName>Chris</FirstName>
                          <LastName>Johnson</LastName>
                          <NamePrefixText>Manager</NamePrefixText>
                   </PersonNameDetail>
             </OrganizationPersonDetail>
             <OrganizationPersonDetail>
                   <PersonIdentifier>JH</PersonIdentifier>
                   <PersonNameDetail>
                          <PersonStatusIndicator>ACTIVE</PersonStatusIndicator>
                          <FirstName>Jill</FirstName>
                          <LastName>Holander</LastName>
                   </PersonNameDetail>
                   <PersonElectronicAddressDetail>
                          <ElectronicAddressTypeCode>EMAIL</ElectronicAddressTypeCode>
                          <ElectronicAddressText>my@my.com</ElectronicAddressText>
                          <ElectronicAddressEffectiveDate>2001-01-
01T00:00:00</ElectronicAddressEffectiveDate>
                          <ElectronicAddressStatusIndicator>ACTIVE</ElectronicAddressStatusIndicator>
                   </PersonElectronicAddressDetail>
             </OrganizationPersonDetail>
      </OrganizationDetail>
      <BeachDetail>
             <BeachIdentifier>AK162093</BeachIdentifier>
             <BeachNameDetail>
                   <ProgramInterestName>Demo Beach</ProgramInterestName>
                   <ProgramInterestDescriptionText>For Demonstration</ProgramInterestDescriptionText>
                   <ProgramInterestCommentText>Delete this record./ProgramInterestCommentText>
                   <ProgramInterestStateCode>NV</ProgramInterestStateCode>
                   <ProgramInterestFIPSCountyCode>21000</ProgramInterestFIPSCountyCode>
                   <BeachAccessibilityDetail>
                          <BeachAccessibilityType>PUB_PUB_ACC</BeachAccessibilityType>
```



<BeachAccessibilityComment>Test Comment.</BeachAccessibilityComment>

```
</BeachNameDetail>
            <BeachAttributeDetail>
                  <BeachExtentDetail>
                         <ExtentLengthMeasure>28.45</ExtentLengthMeasure>
                         <ExtentUnitOfMeasureCode>MI</ExtentUnitOfMeasureCode>
                  </BeachExtentDetail>
                  <BeachSwimSeasonLengthDetail>
                         <SwimSeasonStartDate>2001-05-01/SwimSeasonStartDate>
                         <SwimSeasonEndDate>2001-09-30</SwimSeasonEndDate>
                  </BeachSwimSeasonLengthDetail>
                  <!-- Although discouraged, BeachSwimSeason is also allowed to be in the form
                  <BeachSwimSeasonLengthDetail>
                         <SwimSeasonLengthMeasure>3</SwimSeasonLengthMeasure>
                         <SwimSeasonUnitOfMeasureCode>MONTHS</SwimSeasonUnitOfMeasureCode>
                  </BeachSwimSeasonLengthDetail>
                  <MonitoringFrequencyDetail>
                         <SwimSeasonFrequencyMeasure>3</SwimSeasonFrequencyMeasure>
                         <OffSeasonFrequencyMeasure>1</OffSeasonFrequencyMeasure>
      <MonitoringFrequencyUnitOfMeasureCode>PER WEEK</MonitoringFrequencyUnitOfMeasureCode>
                         <MonitoredIrregularly>true</MonitoredIrregularly>
                         <MonitoredIrregularlyComment>This beach is also monitored whenever there is heavy
rain.</MonitoredIrregularlyComment>
                  </MonitoringFrequencyDetail>
                  <!--
                  <MonitoringFrequencyDetail>
                         <MonitoredIrregularly>true</MonitoredIrregularly>
                  </MonitoringFrequencyDetail>
                  -->
                  <BeachPollutionSourceDetail>
                         <BeachPollutionSource>
                               <BeachPollutionSourceCode>CSO</BeachPollutionSourceCode>
                               <BeachPollutionSourceDescription>Comment for
CSO</BeachPollutionSourceDescription>
                         </BeachPollutionSource>
                         <BeachPollutionSource>
                               <BeachPollutionSourceCode>POTW</BeachPollutionSourceCode>
                               <BeachPollutionSourceDescription>Comment for
```



</BeachAccessibilityDetail>

```
POTW</BeachPollutionSourceDescription>
                                                             </BeachPollutionSource>
                                              <!--
                                                             or
                                                             <NoPollutionSourcesIndicator>true</NoPollutionSourcesIndicator>
               <PollutionSourcesUninvestigatedIndicator>true</PollutionSourcesUninvestigatedIndicator>
                                                             -->
                                              </BeachPollutionSourceDetail>
                                              <BeachTierRanking>3</BeachTierRanking>
                                              <BeachActBeachIndicator>true</BeachActBeachIndicator>
                              </BeachAttributeDetail>
                              <BeachActivityDetail>
                                              <ActivityTypeCode>CLOSURE</ActivityTypeCode>
                                              <ActivityName>Demo Activity 1</ActivityName>
                                              <a href="https://doi.org/10.1017/10.2012-01-01708:30:00">ActivityActualStartDate</a>
                                              <ActivityActualStopDate>2003-01-01T23:59:59</ActivityActualStopDate>
                                              <ActivityReasonDetail>
                                                             <ActivityReasonType>ELEV_BACT</ActivityReasonType>
                                                             <ActivityReasonDescriptionText>Demo
Description</ActivityReasonDescriptionText>
                                              </ActivityReasonDetail>
                                              <ActivitySourceDetail>
                                                             <ActivitySourceType>SEWER_LINE</ActivitySourceType>
                                                             <a href="#"><ActivitySourceDescriptionText>Shut her down Clancy, she's pumpin"></a>
mud!</ActivitySourceDescriptionText>
                                              </ActivitySourceDetail>
                                              <ActivityIndicatorDetail>
                                                             <a href="https://www.edu.new.com/activityIndicatorType">ActivityIndicatorType</a>
                                                             <a href="#"><ActivityIndicatorDescriptionText>Demo Description</a>
2</ActivityIndicatorDescriptionText>
                                              </ActivityIndicatorDetail>
                                              <ActivityMonitoringStationIdentifier>NV004|rs001</ActivityMonitoringStationIdentifier>
                                              <a href="https://doi.org/10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-number-10.1016/ncitoring-num
                                              <ActivityDescriptionText>Demo activity description</ActivityDescriptionText>
                                              <ActivityCommentText>Demo</ActivityCommentText>
                                              <ActivityExtentDetail>
                                                             <a href="mailto:</a></activityExtentStartMeasure>4</activityExtentStartMeasure>
                                                             <a href="https://www.example.com/schemes/">ActivityExtentLengthMeasure>
```



```
</ActivityExtentDetail>
      </BeachActivityDetail>
      <BeachRoleDetail>
             <BeachRoleTypeCode>COLLECTOR</BeachRoleTypeCode>
             <BeachRoleOrganizationIdentifier>2349fwe</BeachRoleOrganizationIdentifier>
             <BeachRolePersonIdentifier>SD</BeachRolePersonIdentifier>
             <BeachRoleEffectiveDate>2001-01-01T00:00:00</BeachRoleEffectiveDate>
             <BeachRoleStatusIndicator>ACTIVE</BeachRoleStatusIndicator>
      </BeachRoleDetail>
      <BeachRoleDetail>
             <BeachRoleTypeCode>ANALYZER</BeachRoleTypeCode>
             <BeachRoleOrganizationIdentifier>394e785</BeachRoleOrganizationIdentifier>
             <BeachRoleEffectiveDate>2006-01-01T00:00:00</BeachRoleEffectiveDate>
             <BeachRoleStatusIndicator>ACTIVE</BeachRoleStatusIndicator>
      </BeachRoleDetail>
      <BeachRoleDetail>
             <BeachRoleTypeCode>ANALYZER</BeachRoleTypeCode>
             <BeachRoleOrganizationIdentifier>394e785</BeachRoleOrganizationIdentifier>
             <BeachRolePersonIdentifier>JH</BeachRolePersonIdentifier>
             <BeachRoleEffectiveDate>2001-01-01T00:00:00</BeachRoleEffectiveDate>
             <BeachRoleStatusIndicator>ACTIVE</BeachRoleStatusIndicator>
      </BeachRoleDetail>
</BeachDetail>
<BeachDetail>
      <BeachIdentifier>AK177449</BeachIdentifier>
      <BeachNameDetail>
             <ProgramInterestName>test</ProgramInterestName>
             <ProgramInterestDescriptionText>test</ProgramInterestDescriptionText>
             <ProgramInterestCommentText>test</ProgramInterestCommentText>
             <ProgramInterestStateCode>NV</ProgramInterestStateCode>
             <ProgramInterestFIPSCountyCode>21000</ProgramInterestFIPSCountyCode>
             <BeachAccessibilityDetail>
                   <BeachAccessibilityType>PUB_PUB_ACC</BeachAccessibilityType>
                   <BeachAccessibilityComment>Test Comment.</BeachAccessibilityComment>
             </BeachAccessibilityDetail>
      </BeachNameDetail>
      <BeachRoleDetail>
             <BeachRoleTypeCode>TESTOR</BeachRoleTypeCode>
             <BeachRoleOrganizationIdentifier>394e785</BeachRoleOrganizationIdentifier>
             <BeachRolePersonIdentifier>foi34e0</BeachRolePersonIdentifier>
```

<a href="mailto:</a> <a href="mailto:ActivityExtentUnitOfMeasureCode">ActivityExtentUnitOfMeasureCode</a> <a href="mailto:ActivityExtentUnitOfMeasureCode">ActivityExtentUnitOfMeasureCode</a>



- <BeachRoleEffectiveDate>2001-01-01T00:00:00</BeachRoleEffectiveDate>
- <BeachRoleStatusIndicator>ACTIVE</BeachRoleStatusIndicator>
- </BeachRoleDetail>
- </BeachDetail>
- <BeachProcedureDetail>
  - <ProcedureTypeCode>DA\_ASES\_RISK</ProcedureTypeCode>
  - <ProcedureDescriptionText>Our Procedure to Assess Risk</procedureDescriptionText>
  - <ProcedureIdentifier>PRESS\_RELEAS</procedureIdentifier>
  - <ProcedureBeachIdentifier>AK162093/ProcedureBeachIdentifier>
  - <ProcedureBeachIdentifier>AK162093</procedureBeachIdentifier>
- </BeachProcedureDetail>
- <YearCompletionIndicators>
  - <CompletionYear>2007</CompletionYear>
  - <NotificiationDataCompleteIndicator>true</NotificiationDataCompleteIndicator>
  - <MonitoringDataCompleteIndicator>true</MonitoringDataCompleteIndicator>
  - <LocationDataCompleteIndicator>true</LocationDataCompleteIndicator>
- </YearCompletionIndicators>

</BeachDataSubmission>



# 7 Appendix C Procedure Type Codes

Due to the large number of Procedure Type codes, this appendix provides a separate table to explain the acceptable codes. See Section 3.1.7 for a description of when to use these codes in the XML schema.

Code	Name	Description
DA_ASES_RISK	ADVISORY: Assess risk	Assess risks to potential swimmers
DA_ASES_SICK	ADVISORY: Asses sickness	Assess number of complaints of sickness
DA_DIS_AGNCY	ADVISORY: Discuss with agencies	Discuss situation with other agencies
DA_PRECAUTN	ADVISORY: Precautionary	Perform a precautionary closing in response to hazardous discharges
DA_PREEMPTVE	ADVISORY: Preemptive	Compare conditions to preemptive closing criteria
DA_WTR_STAND	ADVISORY: Compare with water standards	Compare bacterial concentrations with water quality standards to determine whether standards are exceeded
DA_W_Q_MONTR	ADVISORY: Water quality monitoring	Perform water quality modeling
DB_ASES_RISK	COMBINED: Assess risk	Assess risks to potential swimmers
DB_ASES_SICK	COMBINED: Asses sickness	Assess number of complaints of sickness
DB_DIS_AGNCY	COMBINED: Discuss with agencies	Discuss situation with other agencies
DB_PRECAUTN	COMBINED: Precautionary	Perform a precautionary closing in response to hazardous discharges
DB_PREEMPTVE	COMBINED: Preemptive	Compare conditions to preemptive closing criteria
DB_WTR_STAND	COMBINED: Compare with water standards	Compare bacterial concentrations with water quality standards to determine whether standards are exceeded



Code	Name	Description
DB_W_Q_MONTR	COMBINED: Water quality monitoring	Perform water quality modeling
DC_ASES_RISK	CLOSING: Assess risk	Assess risks to potential swimmers
DC_ASES_SICK	CLOSING: Asses sickness	Assess number of complaints of sickness
DC_DIS_AGNCY	CLOSING: Discuss with agencies	Discuss situation with other agencies
DC_PRECAUTN	CLOSING: Precautionary	Perform a precautionary closing in response to hazardous discharges
DC_PREEMPTVE	CLOSING: Preemptive	Compare conditions to preemptive closing criteria
DC_WTR_STAND	CLOSING: Compare with water standards	Compare bacterial concentrations with water quality standards to determine whether standards are exceeded
DC_W_Q_MONTR	CLOSING: Water quality monitoring	Perform water quality modeling
IA_BEACH	ADVISORY: Post at Beach	Post advisory or closing at the beach
IA_DIF_AGNCY	ADVISORY: Different Agency(ies)	Provide announcement to other government agency(ies)
IA_INTERNAL	ADVISORY: Internal Agency	Provide announcement to internal agency staff
IA_INTERNET	ADVISORY: Post on Internet	Post advisory or closing on the Internet
IA_NEWSPAPER	ADVISORY: Newspaper article	Publish advisory or closing in local newspaper
IA_PHONE	ADVISORY: Provide phone line	Provide results on hotline/water quality information/result phone line
IA_PHYS_ISOL	ADVISORY: Physical Isolation	Physically isolate contaminated area (e.g., block access, fence off area)



Code	Name	Description
IA_RADIO	ADVISORY: Radio announcement	Have advisory or closing announced on local radio station
IA_RESP_PRSN	ADVISORY: Notify responsible person	Notify owner/manager/operator/lifeguards of results
IA_TV_ANNCE	ADVISORY: TV announcement	Have advisory or closing announced on local TV station
IB_BEACH	COMBINED: Post at Beach	Post advisory or closing at the beach
IB_DIF_AGNCY	COMBINED: Different Agency(ies)	Provide announcement to other government agency(ies)
IB_INTERNAL	COMBINED: Internal Agency	Provide announcement to internal agency staff
IB_INTERNET	COMBINED: Post on Internet	Post advisory or closing on the Internet
IB_NEWSPAPER	COMBINED: Newspaper article	Publish advisory or closing in local newspaper
IB_PHONE	COMBINED: Provide phone line	Provide results on hotline/water quality information/result phone line
IB_PHYS_ISOL	COMBINED: Physical Isolation	Physically isolate contaminated area (e.g., block access, fence off area)
IB_RADIO	COMBINED: Radio announcement	Have advisory or closing announced on local radio station
IB_RESP_PRSN	COMBINED: Notify responsible person	Notify owner/manager/operator/lifeguards of results
IB_TV_ANNCE	COMBINED: TV announcement	Have advisory or closing announced on local TV station
IC_BEACH	CLOSING: Post at Beach	Post advisory or closing at the beach



Code	Name	Description
IC_DIF_AGNCY	CLOSING: Different Agency(ies)	Provide announcement to other government agency(ies)
IC_INTERNAL	CLOSING: Internal Agency	Provide announcement to internal agency staff
IC_INTERNET	CLOSING: Post on Internet	Post advisory or closing on the Internet
IC_NEWSPAPER	CLOSING: Newspaper article	Publish advisory or closing in local newspaper
IC_PHONE	CLOSING: Provide phone line	Provide results on hotline/water quality information/result phone line
IC_PHYS_ISOL	CLOSING: Physical Isolation	Physically isolate contaminated area (e.g., block access, fence off area)
IC_RADIO	CLOSING: Radio announcement	Have advisory or closing announced on local radio station
IC_RESP_PRSN	CLOSING: Notify responsible person	Notify owner/manager/operator/lifeguards of results
IC_TV_ANNCE	CLOSING: TV announcement	Have advisory or closing announced on local TV station
MO_BEACH	Post at Beach	Post results at beach
MO_DIF_AGNCY	Different Agency	Provide results to different agency staff for evaluation
MO_INTERNAL	Internal Agency	Provide results to internal agency staff for evaluation
MO_INTERNET	Post on article	Post results on the Internet
MO_NEWSPAPER	Newspaper article	Publish results in local newspaper
MO_ON_REQUST	Provide on request	Provide results to anyone on request
MO_PHONE	Provide phone line	Provide results on hotline/water quality information/results/phone line
MO_RADIO	Radio announcement	Have results announced on local radio station



Code	Name	Description
MO_RESP_PRSN	Notify responsible person	Notify owner/manager/operator/lifeguards of results
MO_TV_ANNCE	TV announcement	Have results announced on local TV station
OT_OTHER	Other	Other
RA_ASES_RISK	ADVISORY: Assess risks	Assess risks to potential swimmers
RA_ASES_SICK	ADVISORY: Assess sickness	Assess number of complaints of sickness
RA_BEACH	ADVISORY: Post at beach	Post announcement at the beach
RA_DIF_AGNCY	ADVISORY: Discuss with agencies	Discuss situation with other agencies
RA_INTERNAL	ADVISORY: Agency	Provide announcement to agency staff
RA_INTERNET	ADVISORY: Post on Internet	Post reopening on the Internet
RA_LOCAL_GOV	ADVISORY: Local government	Provide announcement to local government staff
RA_NEWSPAPER	ADVISORY: Newspaper article	Publish reopening in local newspaper
RA_PHONE	ADVISORY: Provide phone line	Provide results on hotline/water quality information/result phone line
RA_PHYS_ISOL	ADVISORY: Remove physical isolation	Remove physical barriers set when closed
RA_RADIO	ADVISORY: Radio announcement	Have reopening announced on local radio station
RA_RESAMPLE	ADVISORY: Resample	Resample and compare bacterial concentrations with water quality standards to determine whether levels are below



Code	Name	Description
RA_RESP_PRSN	ADVISORY: Notify responsible person	Notify owner/manager/operator/lifeguards of results
RA_STD_RAIN	ADVISORY: Standard rain reopening	Reopen after a set number of days following rainfall
RA_TV_ANNCE	ADVISORY: TV announcement	Have reopening announced on local TV station
RB_ASES_RISK	COMBINED: Assess risks	Assess risks to potential swimmers
RB_ASES_SICK	COMBINED: Assess sickness	Assess number of complaints of sickness
RB_BEACH	COMBINED: Post at beach	Post announcement at the beach
RB_DIF_AGNCY	COMBINED: Discuss with agencies	Discuss situation with other agencies
RB_INTERNAL	COMBINED: Agency	Provide announcement to agency staff
RB_INTERNET	COMBINED: Post on Internet	Post reopening on the Internet
RB_LOCAL_GOV	COMBINED: Local government	Provide announcement to local government staff
RB_NEWSPAPER	COMBINED: Newspaper article	Publish reopening in local newspaper
RB_PHONE	COMBINED: Provide phone line	Provide results on hotline/water quality information/result phone line
RB_PHYS_ISOL	COMBINED: Remove physical isolation	Remove physical barriers set when closed
RB_RADIO	COMBINED: Radio announcement	Have reopening announced on local radio station



Code	Name	Description
RB_RESAMPLE	COMBINED: Resample	Resample and compare bacterial concentrations with water quality standards to determine whether levels are below
RB_RESP_PRSN	COMBINED: Notify responsible person	Notify owner/manager/operator/lifeguards of results
RB_STD_RAIN	COMBINED: Standard rain reopening	Reopen after a set number of days following rainfall
RB_TV_ANNCE	COMBINED: TV announcement	Have reopening announced on local TV station
RC_ASES_RISK	CLOSING: Assess risks	Assess risks to potential swimmers
RC_ASES_SICK	CLOSING: Assess sickness	Assess number of complaints of sickness
RC_BEACH	CLOSING: Post at beach	Post announcement at the beach
RC_DIF_AGNCY	CLOSING: Discuss with agencies	Discuss situation with other agencies
RC_INTERNAL	CLOSING: Agency	Provide announcement to agency staff
RC_INTERNET	CLOSING: Post on Internet	Post reopening on the Internet
RC_LOCAL_GOV	CLOSING: Local government	Provide announcement to local government staff
RC_NEWSPAPER	CLOSING: Newspaper article	Publish reopening in local newspaper
RC_PHONE	CLOSING: Provide phone line	Provide results on hotline/water quality information/result phone line
RC_PHYS_ISOL	CLOSING: Remove physical isolation	Remove physical barriers set when closed



Code	Name	Description
RC_RADIO	CLOSING: Radio announcement	Have reopening announced on local radio station
RC_RESAMPLE	CLOSING: Resample	Resample and compare bacterial concentrations with water quality standards to determine whether levels are below
RC_RESP_PRSN	CLOSING: Notify responsible person	Notify owner/manager/operator/lifeguards of results
RC_STD_RAIN	CLOSING: Standard rain reopening	Reopen after a set number of days following rainfall
RC_TV_ANNCE	CLOSING: TV announcement	Have reopening announced on local TV station



# 8 Appendix D Additional Notifications

One feature of the notification schema is that users can submit activities over time as they happen, rather than being forced to submit them all at once. The primary Notification XML element is comprised of three main sub-elements:

- OrganizationDetail, containing information related to the organizations involved in the Beach Act Grant Program.
- BeachDetail, containing information related to the beaches overseen by the National Beach Program.
- BeachProcedureDetail, contains information related to the procedures used by beaches for Monitoring, Notification, issuance, and reopening.

An XML document containing additional activities needs only contain a portion of the BeachDetail element.

The BeachDetail element contains information on specific beaches, including the BeachId, name data, attribute data, activity data, and role data. During the initial submission (or initial submission for a given beach), all required information in the BeachDetail element must be included. During subsequent submissions (to add activities to specific beaches) only the activity data should be included. This activity data falls under the BeachDetail sub-element, BeachActivityDetail.

Exhibit 12 is an example Notification XML document containing two activities for the beach TX259473. Note that additional activities for TX259473 would be added by inserting additional BeachActivityDetail elements to the existing BeachDetail element. Activities on additional beaches would be added through the addition of BeachDetail elements.

#### Exhibit 12 Example Notification XML Document

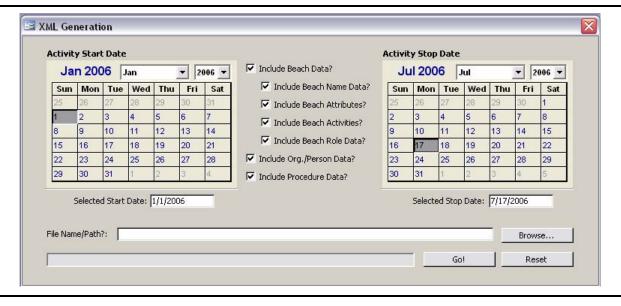


<sup>\*</sup> Beach Name data can be updated in the subsequent Notification XML submissions. This is accomplished through the inclusion of the BeachNameDetail element (see the Beach Notification User's Guide, pages 3-13 to 3-15, 5-4).

```
<ActivitySourceType>UNKNOWN</ActivitySourceType>
            </ActivitySourceDetail>
            <ActivityIndicatorDetail>
                <ActivityIndicatorType>ENTERO</ActivityIndicatorType>
            </ActivityIndicatorDetail>
<ActivityMonitoringStationIdentifier>21TXBCH|NUE030</ActivityMonitoringStationIdentifier>
        </BeachActivityDetail>
        <BeachActivityDetail>
            <ActivityTypeCode>CONTAM_ADV</ActivityTypeCode>
            <ActivityName>Advisory</ActivityName>
            <ActivityActualStartDate>2003-11-14T16:10:00</ActivityActualStartDate>
            <ActivityActualStopDate>2003-11-14T04:10:00</ActivityActualStopDate>
            <ActivityReasonDetail>
                <ActivityReasonType>ELEV_BACT</ActivityReasonType>
                <ActivityReasonDescriptionText>119 cfu</ActivityReasonDescriptionText>
            </ActivityReasonDetail>
            <ActivitySourceDetail>
                <ActivitySourceType>UNKNOWN</ActivitySourceType>
            </ActivitySourceDetail>
            <ActivityIndicatorDetail>
                <ActivityIndicatorType>ENTERO</ActivityIndicatorType>
            </ActivityIndicatorDetail>
<ActivityMonitoringStationIdentifier>21TXBCH|NUE034</ActivityMonitoringStationIdentifier>
        </BeachActivityDetail>
    </BeachDetail>
</BeachDataSubmission>
```

Previously, users of the PRAWN Notification Access database were unable to generate valid XML files for these additional, interim submissions. With the addition of the Custom XML Generation macro, users now have more control over which data to include in individual submissions.

Exhibit 13 Custom XML Generation





This form allows a user to choose which of the three main data sub-elements to submit, as well as which sections of the BeachDetail element (Names, Attributes, Activities, and Roles) should be included. The calendars allow a user to narrow down the Activities to a specific timeframe. If the BeachActivityDetail element is not included in a submission, the calendars become inactive.

To generate a custom file, simply follow these steps:

- 1. Open the Notification Access Database.
- 2. From the 'Macros' window, select the 'Custom XML Generation' macro.
- 3. Once the Custom XML Generation macro is started, a screen (Exhibit 13) will be presented.
- 4. Select which data should be included in the Notification XML submission by checking or unchecking the boxes in the center of the windows.
  - a. Note that the calendars allow for the selection of activities within a specific date range. If activities are not included in a given submission, these calendars will be inactive.
- 5. Click the "Browse..." button to select a name and location for the Notification XML submission.
- 6. Once the selections have been made, click the "Go!" button to generate a Notification XML submission with the selected data.
- 7. A message will display with details of the file generation, along with confirmation that the Notification XML submission was generated successfully.

### A note on activity submissions:

Because it is possible for multiple activities to overlap on portions of the same beach, it is not
possible to determine if duplicate activities have been submitted. For this reason, it is *critically important* that State users track those activities that have been previously submitted; submitting
an activity twice *will* result in a duplicate activity in PRAWN. Should an activity be submitted
multiple times, please contact the EPA Beach program manager to correct the error.

