

Tracking and Reporting Progress of Wisconsin AOCs



Gail Epping Overholt

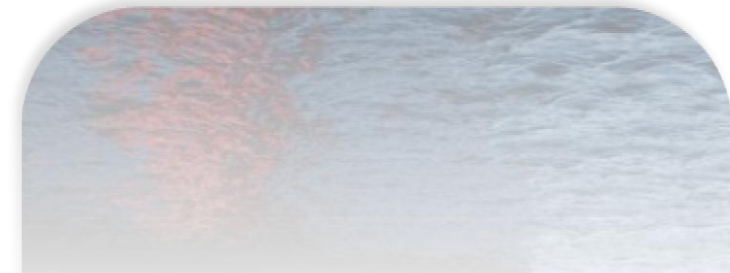
Wisconsin's Great Lakes Areas of Concern Meeting

November 4, 2011

Tundra Lodge & Convention Center

Challenge:

- Different Audiences
- Different Reporting Needs
 - Visual Appeal
 - Understandable
 - Detail
 - Complexity



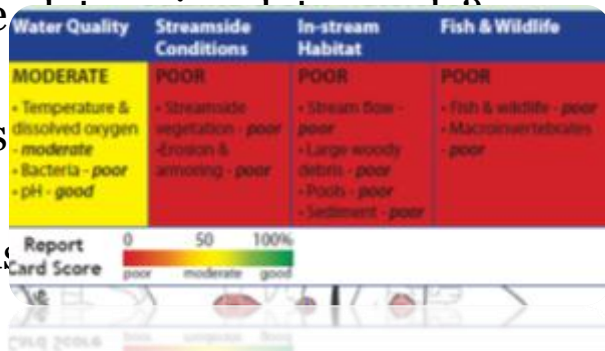
Building a Tool

Researched sample tools that translate metrics into visual elements

How do we

Who needs

What needs



Can we integrate the **Wisconsin Aoc Tracking & Reporting (WATR)** Tool with **Surface Water Information Management System (SWIMS)**

WATR ↔ SWIMS

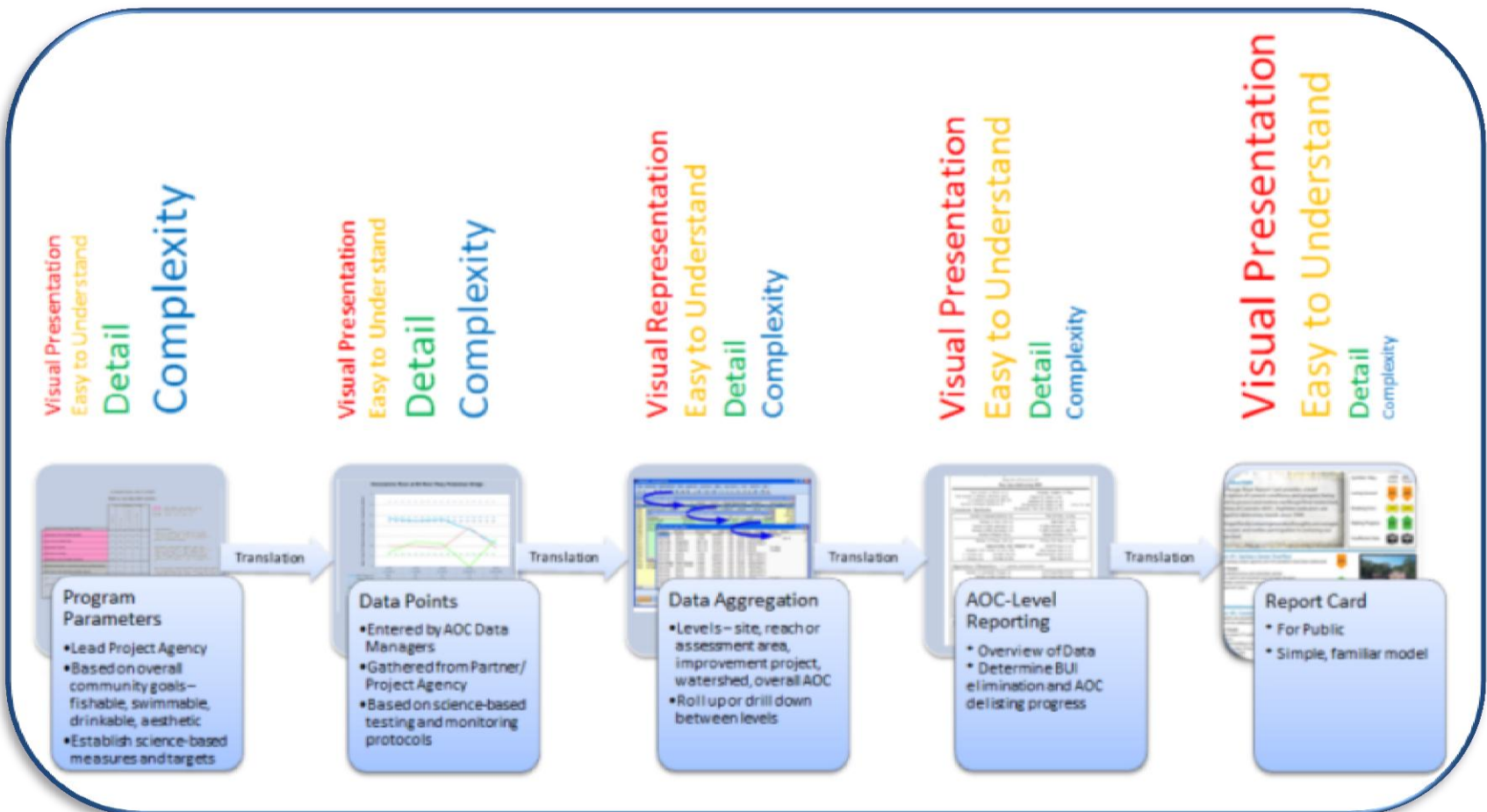




Project Status

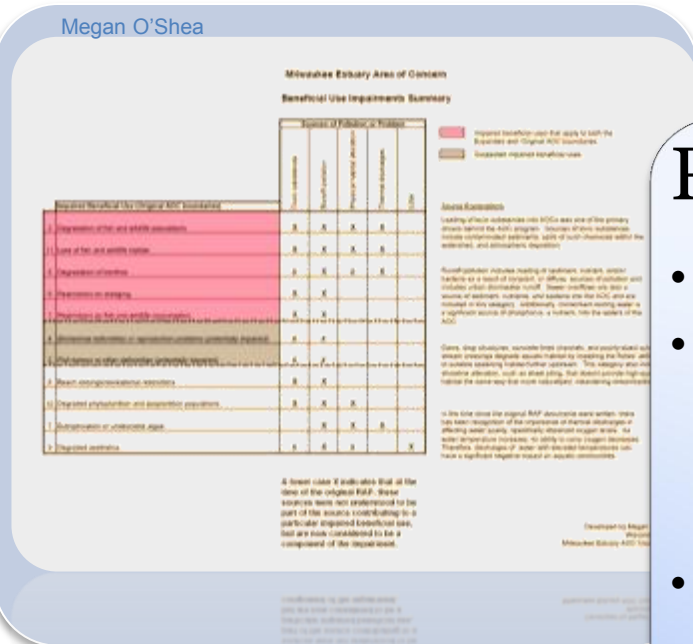
- **Researching** other State AOC & Watershed Reporting Mechanisms
- **Database & Tool Development** Stage
- **Trial** Status with Local Watershed Action Team Projects
(Menomonee & Kinnickinnic Rivers)
- Determining **Access & Retrieval** Mechanism: Data Entry vs. Viewing?
 - Statewide – Regional – Individual AOC
 - Online vs. Local Network?
- Mechanism for **Generating Updated Reports** automatically

Creating the Reporting Tool Production Train



Stage 1 – Science Based Measure and Targets Identified

Visual Presentation
Easy to Understand
Detail
Complexity



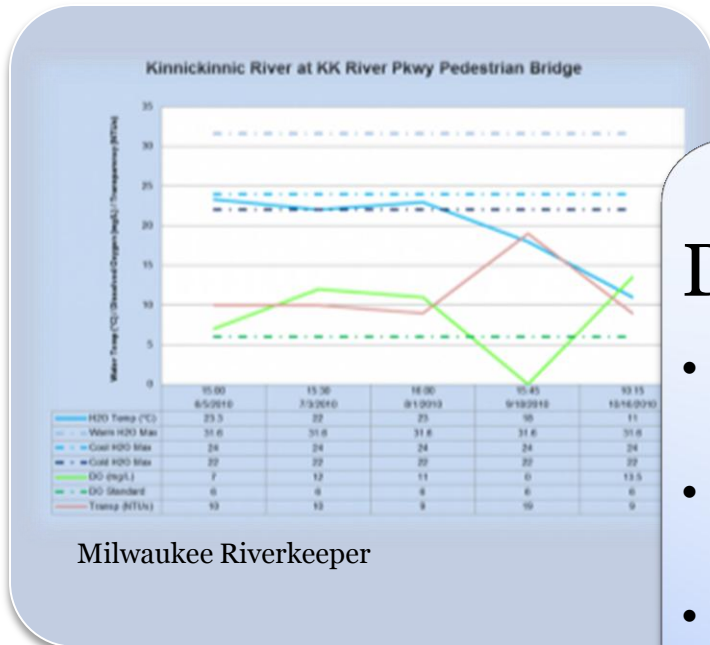
Program Parameters

- Lead Project Agency
- Based on overall community goal for AOC – fishable, swimmable, drinkable, aesthetic
- Establish science-based measures and targets

Translation

Stage 2 – Data Points Gathered by Individual Project Staff

Visual Presentation
Easy to Understand
Detail
Complexity



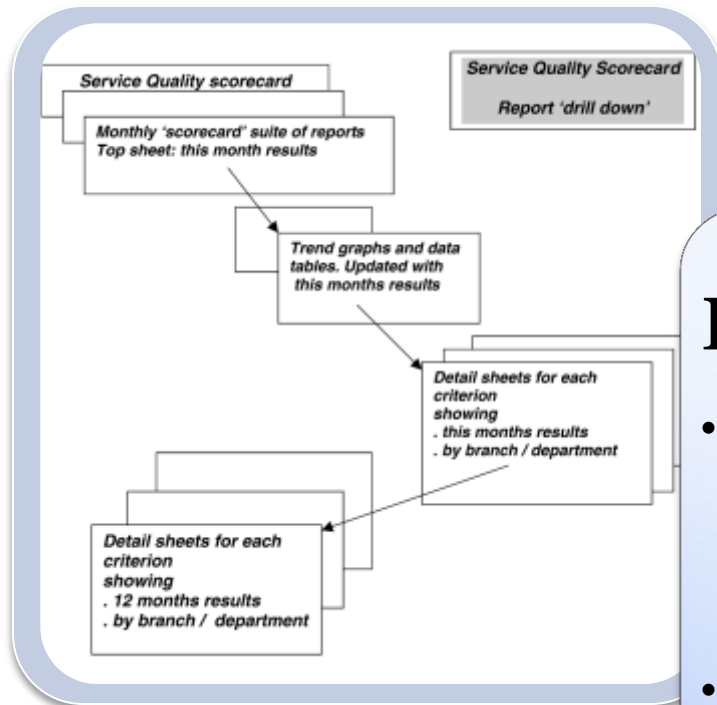
Data Points

- Entered by AOC Data Managers
- Gathered from Partner/Project Agency
- Use Quality Assured monitoring protocols

Translation

Stage 3 – Combined Data per Identified Geographical Element

Visual Representation
Easy to Understand
Detail
Complexity



Data Aggregation

- Levels – site, reach or assessment area, improvement project, watershed, overall AOC
- Roll up or drill down between levels

Translation

Stage 4–

Visual Presentation
Easy to Understand
Detail
Complexity

	SHU	LRM	UT	2009 Average	2009 Average	2009 to 2010
2009 to 2010						Improrved (Y/N)
Priority Allowed	27	27	24	22.1	22.6	M
Notional Ranking - Priority	22	22	22	22	22	M
Time Delayed (Priority Allowed)	22.7	22.9	22.0	22.0	22.2	M
Notional Ranking - Time Delay	22	22	22	22	22	M
Passing Delay						
Passing Time Allowed	21.8	21.8	21.7	21.0	21.5	M
Attempts	21	21	21	21	21	M
Pass Value Attempts	21	21	21	21	21	M
Completion %	21.8	21.8	21.7	21.0	21.5	M
Passing Efficiency Delay	21.8	21.8	21.7	21.0	21.5	M
Notional Ranking	21.8	21.8	21.7	21.0	21.5	M
Notional Ranking (Efficiency)	21	21	21	21	21	M
Ranking Delay						
Ranking Time	21.8	21.8	21.7	21.0	21.5	M
Rank Value Attempts	21	21	21	21	21	M
Notional Rank - Rank Delay	21	21	21	21	21	M
Rank						
Rank	2	2	2	2	2	M
Rank Delay	21.8	21.8	21.7	21.0	21.5	M
Notional Ranking - Rank	21	21	21	21	21	M
Turnover						
Subscript	2	2	2	2	2	M
Turnover Subscript	2	2	2	2	2	M
Turnover Subscript	2	2	2	2	2	M
Turnover						
Turnover	22	22	22	22	22	M
Turnover for Low	22	22	22	22	22	M
Turnover for Low	22.0	22.0	22.0	22.0	22.0	M
Turnover						
Turnover	22	22	22	22	22	M
Turnover	22	22	22	22	22	M

AOC-Level Reporting

- Overview of Data
- Determine BUI elimination and AOC delisting progress

Translation

Stage 5 – Communicating Progress to the Public

Visual Presentation

Easy to Understand

Detail

Complexity



Report Card

- For Public
- Simple, familiar model
- Language and parameters understandable to non-scientists

Stage 5 – Communicating Progress to the Public

Visual Presentation

Easy to Understand

Detail

Complexity

JUANITA CREEK WATERSHED REPORT CARD

As a resident living near Juanita Creek, your daily actions affect the health of the Juanita Creek watershed health affects your quality of life.

This report card summarizes information regarding the environmental health of the Juanita Creek Watershed and provides you with information on how to protect, enhance, and improve natural features in the watershed. The health of the creek was determined by measuring the physical conditions of the Creek along with the chemicals, nutrients and bacteria, and the types of aquatic species and vegetation found in and along the creek.

Join us in working toward a healthy watershed - a watershed with clean, safe water for recreation, an habitat for fish, wildlife & humans. Please take a moment to read about some actions that you can take to share your thoughts on the last pages of this Report.

Summary of Conditions in the Juanita Creek Watershed

Water Quality	Streamside Conditions	In-stream Habitat	Fish & Wildlife
MODERATE	POOR	POOR	POOR
<ul style="list-style-type: none"> Temperature & dissolved oxygen - moderate Bacteria - poor pH - good 	<ul style="list-style-type: none"> Streamside vegetation - poor Erosion & armoring - poor 	<ul style="list-style-type: none"> Stream flow - poor Large woody debris - poor Pools - poor Sediment - poor 	<ul style="list-style-type: none"> Fish & wildlife - poor Macroinvertebrates - poor



What is the Juanita Creek Watershed?

A watershed area of land that drains by hills. It drains the water that falls off our property into a common body of water, such as a stream, river, or lake.

The Juanita Creek Watershed is the area of land that drains into the Juanita Creek.

Fish & Wildlife

POOR

Indicator & Description	Desired Level or Range	Current Conditions
Fish & wildlife , or signs of their presence, signal a functioning stream system.	Abundant, diverse populations.	Small numbers of cutthroat trout & coho, sockeye & kokanee salmon observed. Signs of beaver present in creek. Ducks & other waterfowl present in creek.
Benthic macroinvertebrates are bugs that live in stream sediments. An IBI score summarizes the number & kinds of these creatures. The IBI values indicate water quality & range from 50 (excellent) to 10 (poor).	Large diversity of creatures, especially those requiring undisturbed conditions.	Samples indicate a low diversity & abundance of benthic creatures. IBI score ranges from 16 (very poor) to 19 (poor).

Volunteers have seen small numbers of kokanee, sockeye & coho salmon on Juanita Creek



The City of Kirkland is committed to restoring, protecting & enhancing Kirkland's creeks, including Juanita Creek.

To see what the City is doing to help Juanita Creek, visit www.ci.kirkland.wa.us/JuanitaCreek

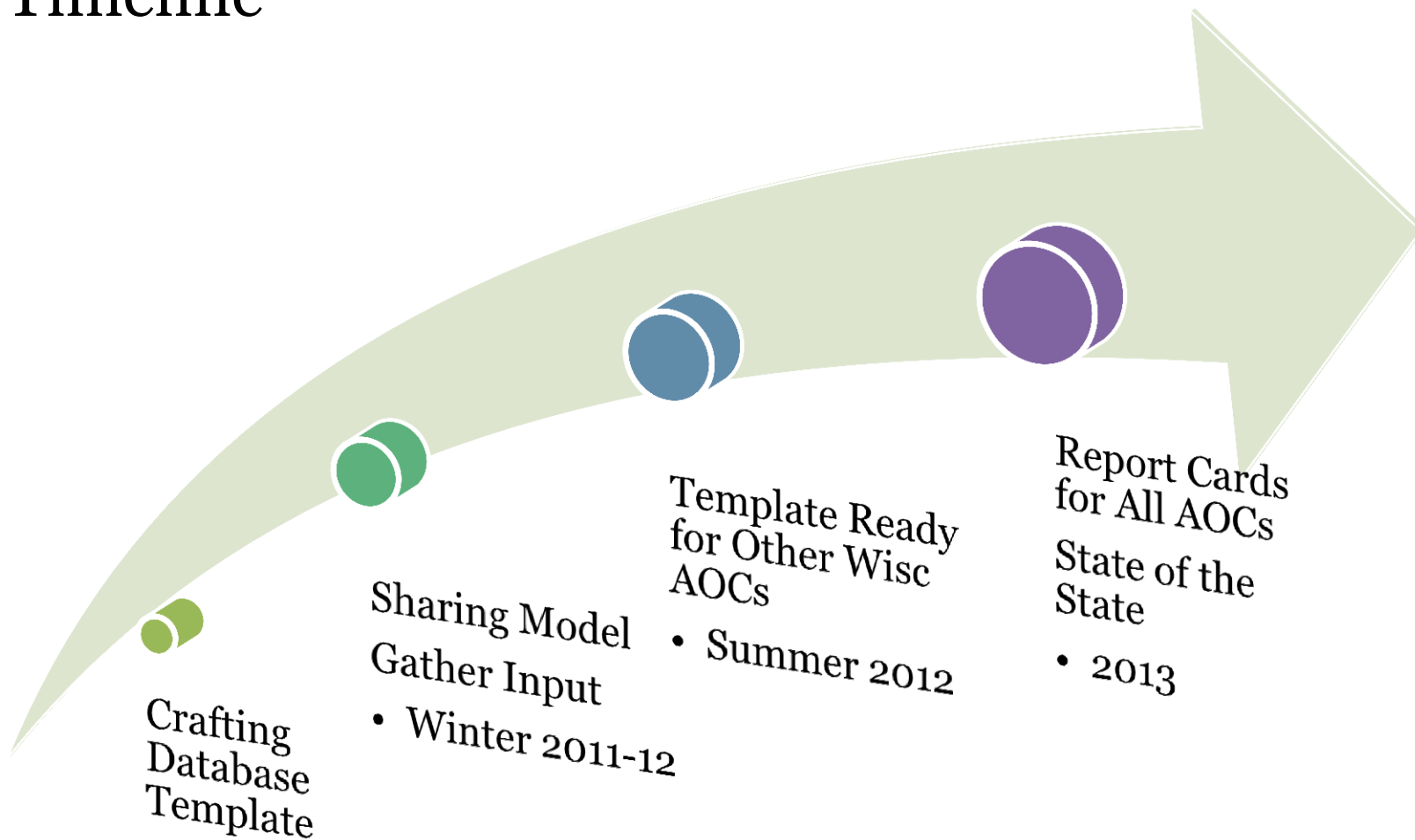
For more information, contact Public Works at stormwater@ci.kirkland.wa.us or (425) 587-3800.

References:

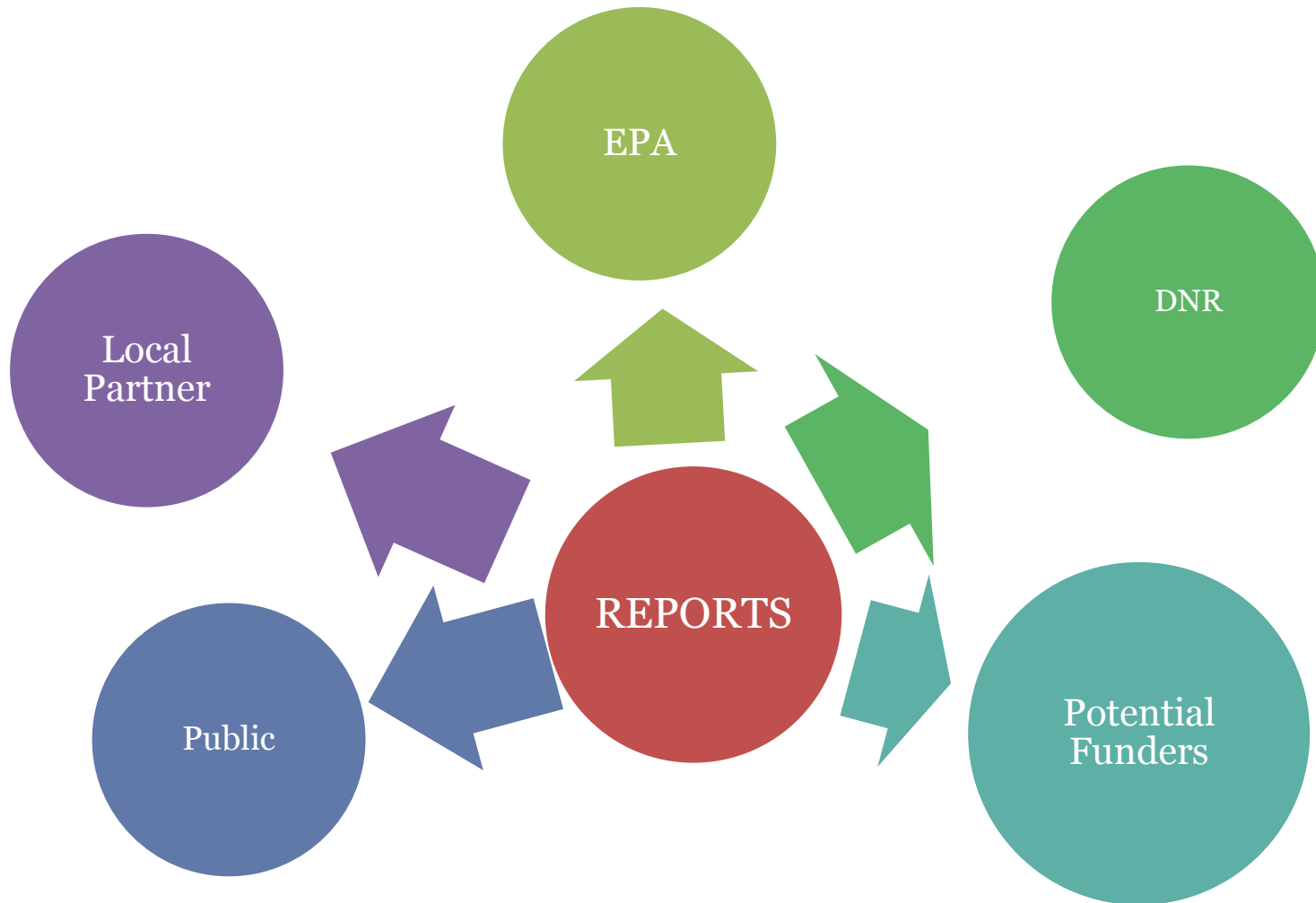
- King County Water Quality Monitoring - Juanita Creek Site 0446 (<http://green.kingcounty.gov>, search "Juanita Site 0446")
- Habitat Inventory & Assessment of Juanita Creek (<http://green.kingcounty.gov>, search "Juanita Inventory")
- Kirkland Surface Water Master Plan (<http://www.ci.kirkland.wa.us>, search "Surface Water Master Plan")

City of Kirkland, WA

Timeline



Yeah! One tool for all projects



Credits:

John Hacker, Volunteer



John Loy, Student Assistant



Credits:



City of Kirkland Washington
Megan O'Shea



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Learning for life



Questions / Ideas?

Gail Epping Overholt
Regional Natural Resources Educator
UW-Extension
gail.overholt@uwex.edu
414.256.4632