
USMCA Tijuana River Watershed

Eligible Public Entities Coordinating Group (EPECG)

May 19, 2021
11:00 a.m. – 1:00 p.m. Pacific
(2:00 p.m. – 4:00 p.m. Eastern)

Agenda

11:00 am **Welcome and Overview**

11:10 am **Part 1: Updates**

- USMCA process updates
 - Addressing recent transboundary flows
-

Part 2: Grouping Projects into Alternatives

11:15 am

- Alternatives development approach
- Demonstration alternatives

Discussion & Questions

Part 3: Method for Evaluating Alternatives

12:00 pm

- Overview

Discussion & Questions

12:50 pm **Next Steps & Upcoming Milestones**

1:00 pm **Closing Remarks & Adjourn**



USMCA Tijuana River Watershed

Eligible Public Entities Coordinating Group (EPECG)

Virtual Meeting: May 19, 2021



EPECG - Principals and Delegates

- CalEPA
 - California Natural Resource Agency
 - City of Chula Vista
 - City of Coronado
 - City of Imperial Beach
 - City of San Diego
 - North American Development Bank
 - Port of San Diego
 - San Diego County
 - San Diego Regional Board
 - US Army Corps of Engineers
 - US Customs & Border Protection
 - US Department of Commerce
 - US Department of State
 - US Fish and Wildlife
 - US International Boundary and Water Commission
 - US Navy
- Congressional staff also participating

Welcome & Overview

Today's Agenda

- **Part 1: Updates**
 - USMCA project updates
 - Addressing recent transboundary flows

- **Part 2: Grouping Projects into Alternatives**
 - Alternatives development approach
 - Demonstration of alternatives
 - Discussion & Questions

- **Part 3: Method for Evaluating Alternatives**
 - Overview
 - Discussion & Questions

- **Next Steps & Upcoming Milestones**

Part 1: USMCA Process

Overview & Updates

Dave Smith, EPA Region 9

USMCA Project Development Updates

- **Initial Feasibility Analysis:** Completed
 - Provided overview to EPECG / Received Input & feedback
 - Carried forward 9 technically feasible projects
- **NEPA:** In-Process
 - Public scoping meeting held April 20; comment period ends on May 20
 - Field surveys
 - Introductory meetings with cross-cutting Agencies
- **Additional Feasibility Analysis**
 - Based on EPECG feedback, conducting additional targeted analyses of specific projects (e.g., Project 1)
- **Expected decision on preferred alternative(s):** July-August 2021



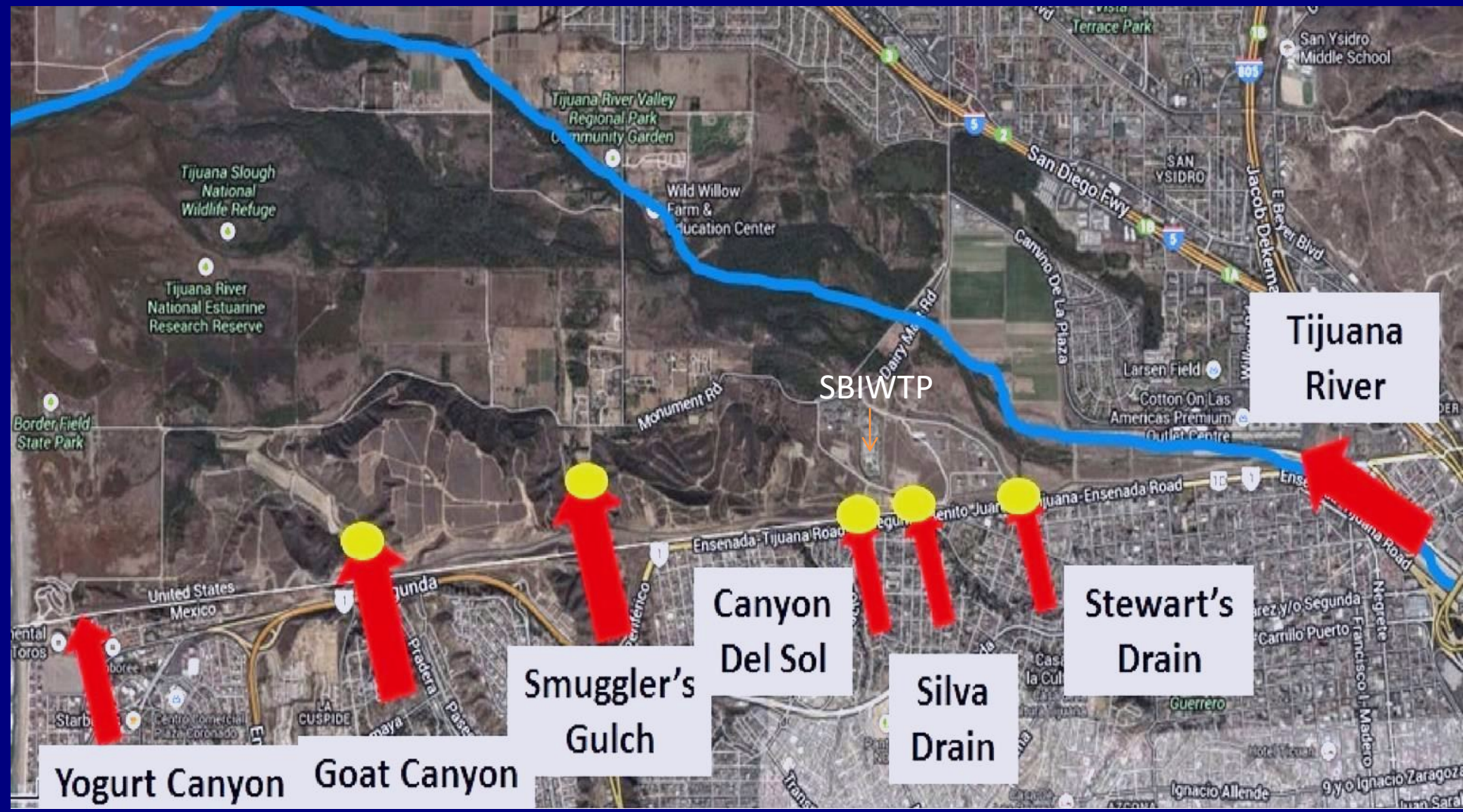
Tijuana River Non-Stormwater Flow Mitigation

Presentation for the
USMCA Eligible Public Entities Group
May 19, 2021

Xochitl Aranda, P.E.
Acting Principal Engineer of Operations
IBWC - U.S. Section



Tijuana River Area Map





San Diego Field Office





San Diego Field Office

Increased Staffing

- Area Operations Manager, onboard 4/26/2021
- Civil Engineer, onboard 5/10/2021
- Civil Engineer Technician, position announcement pending
- End state staffing four Engineers/Techs and one Admin

Increased staffing will allow greater short- and long-term management and O&M oversight of the South Bay International Wastewater Treatment Plant (SBIWTP) and increased engagement with CILA counterparts.

Priorities:

1. Provide support to CILA so that dry-weather transboundary flows are mitigated
2. Maintain proper operations and capacity of the SBIWTP
3. Engage with CILA for coordinated and enhanced operations and maintenance between SBIWTP and Mexican wastewater infrastructure



South Bay International Wastewater Treatment Plant

Challenges

- No equipment downtime to perform PM
- Lack of PM results in more repairs
- Influent flows when greater than 25 MGD
- Sediment in influent causes more wear on plant components requiring more frequent replacement and/or refurbishment



Actions

- Continue to track and ensure completion of all required preventive maintenance
- Execute capital improvement projects to maintain proper plant operation
- Request funds from Congress annually to continue Capital Improvement Plan



South Bay International Wastewater Treatment Plant

2021-2025 Five-Year Capital Plan received April 2021

2021 Capital Improvements Plan Highlights

- SCADA Upgrades- in progress
- Two influent pump replacements- in progress
- Rehabilitate 2 belt filter presses- approved (\$685K)
- Replace valves at Junction Box 1- proposal (\$2M)
- Replace influent pipe section, valves, and meter- proposal (\$1.25M)
- Barscreen refurbishment/replacements – proposal (\$1.14M)



Compliance Assurance Report – being developed to identify all SBIWTP shortcomings and outstanding maintenance issues and to include a schedule for corrective actions. Due June 20, 2021



CILA Pump Station

- Operated by CILA
- Commissioned 1991
- Partial modification 2004
- Further upgrades in progress to include trash and grit removal processing
- Pump Station capacity 30 MGD and capable of handling low-volume TJ River flows
- All pumps operational including backup pumps





CILA Pump Station



Before



New grit and trash removal pretreatment



Today





Current Initiatives

- Install 10 catch basins at collectors for flow grab sampling
- Install sandbags to reinforce collector weirs
- Purchased equipment for CILA loan and use as needed to support their efforts to reduce cross border flows
 - 1 vector truck - ordered
 - 1 truck loader - ordered
 - 1 track loader - ordered
 - 2 portable pumps - received
 - Portable flow meters – received
 - Sandbag filler – received
 - Portable power generators - received



Future Initiatives

Work with CILA to:

- Inspect and identify sources of non-stormwater flows into TJ River and collectors
- Identify CILA wastewater infrastructure shortfalls and inadequacies and assist CILA in developing a plan of action to address
- Develop a deployment plan for best use of equipment purchased by IBWC for CILA use
- Work further with CILA to identify remedies to further prevent cross border flows



For additional information, contact:

Morgan Rogers, P.E.

Area Operations Manager

San Diego Field Office

IBWC - U.S. Section

(619) 662-7601

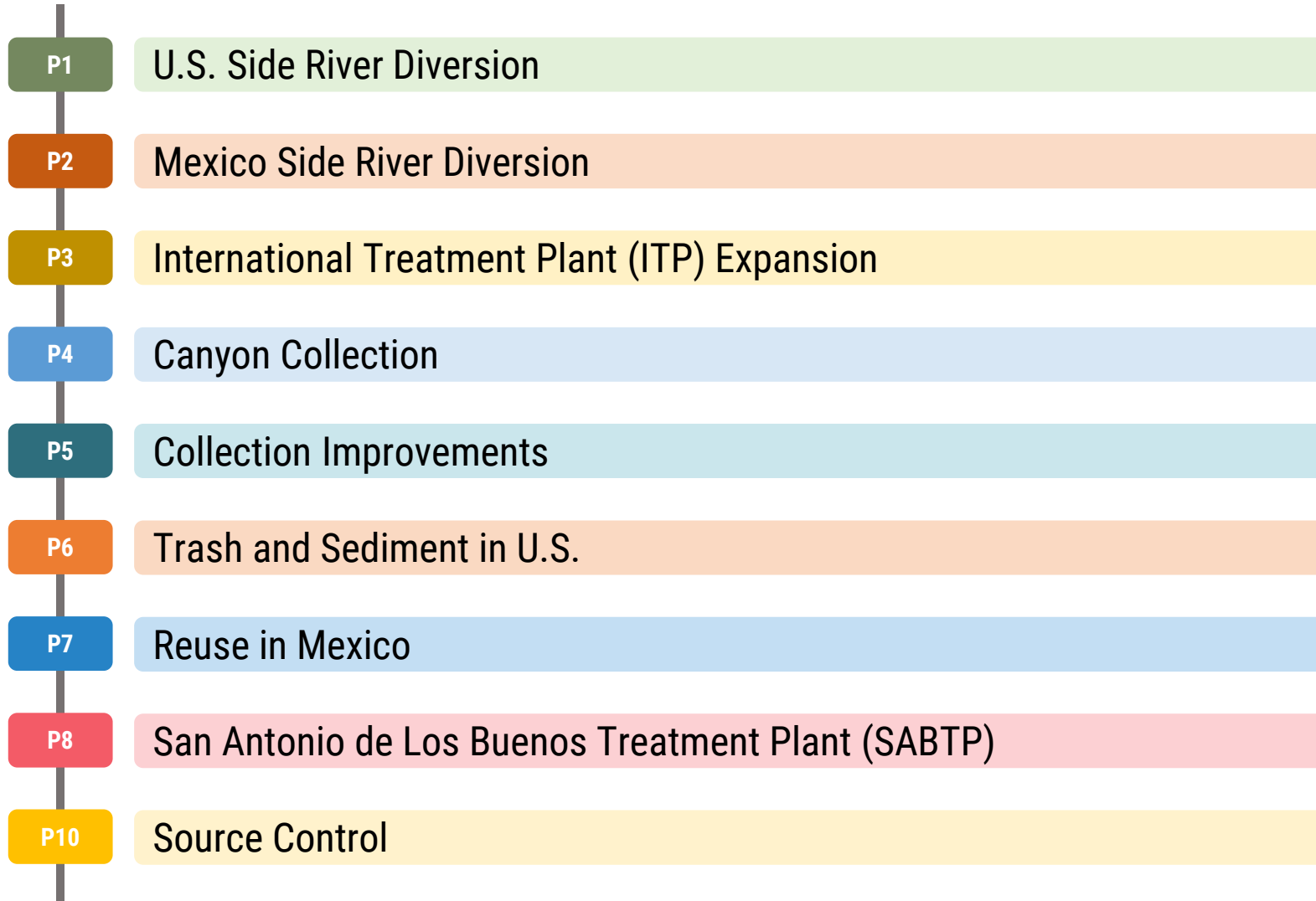
Morgan.Rogers@ibwc.gov

Part 2: Grouping Projects into Alternatives

Overview & Discussion

Doug Eberhardt, EPA Region 9

Potential Projects

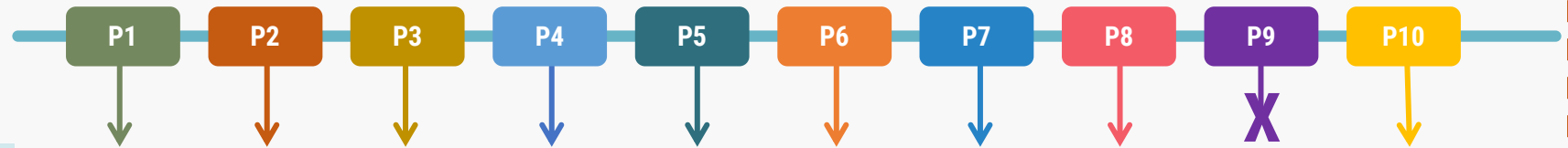


Technical Analysis: Process Overview

20

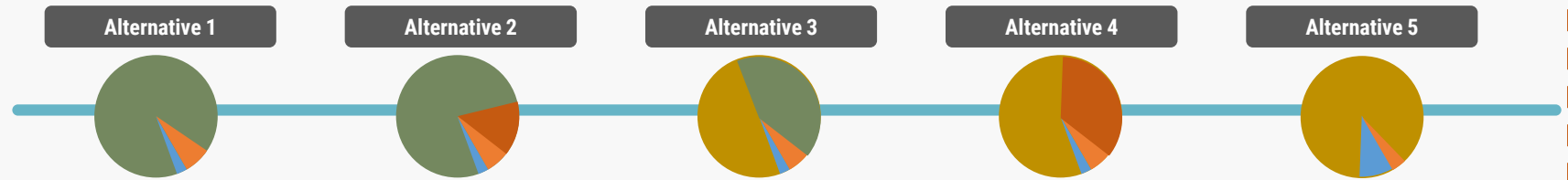
Project Feasibility Analysis

Refine & Assess Projects
(June 2021)



Alternatives Analysis

Identify Potential Alternatives
(June 2021)



Evaluate Alternatives
(July 2021)



Preferred Alternative

Refine/Optimize Alternatives
(July 2021)

Identify Preferred Alternative
(July-August 2021)

Along with 2 reasonable alternatives



Potential Projects and Issues Addressed

Issue Addressed	P1	P2	P3	P4	P5	P6	P7	P8	P10
Dry weather flow in the Tijuana River	✓	✓	✓		✓		✓		
Dry weather flow in SAB Creek		✓	✓	✓			✓	✓	
Wet weather flow in the Tijuana River	✓								✓
Pooling of flow at canyon collectors				✓					
Trash						✓			✓
Sediment						✓			✓

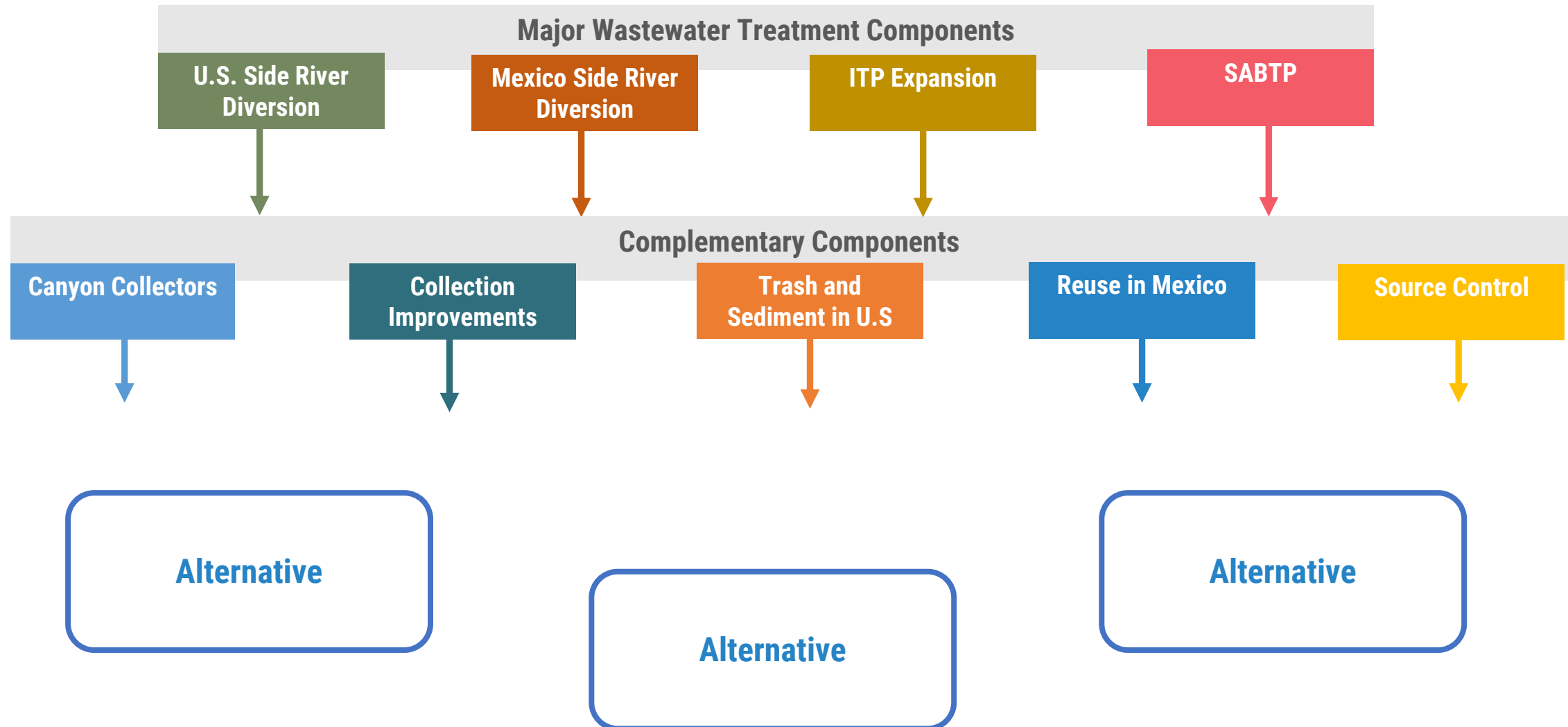
Source of Beach Impacts

- ✓ Substantially Addresses
- ✓ Moderately Addresses

Alternatives: Development Approach

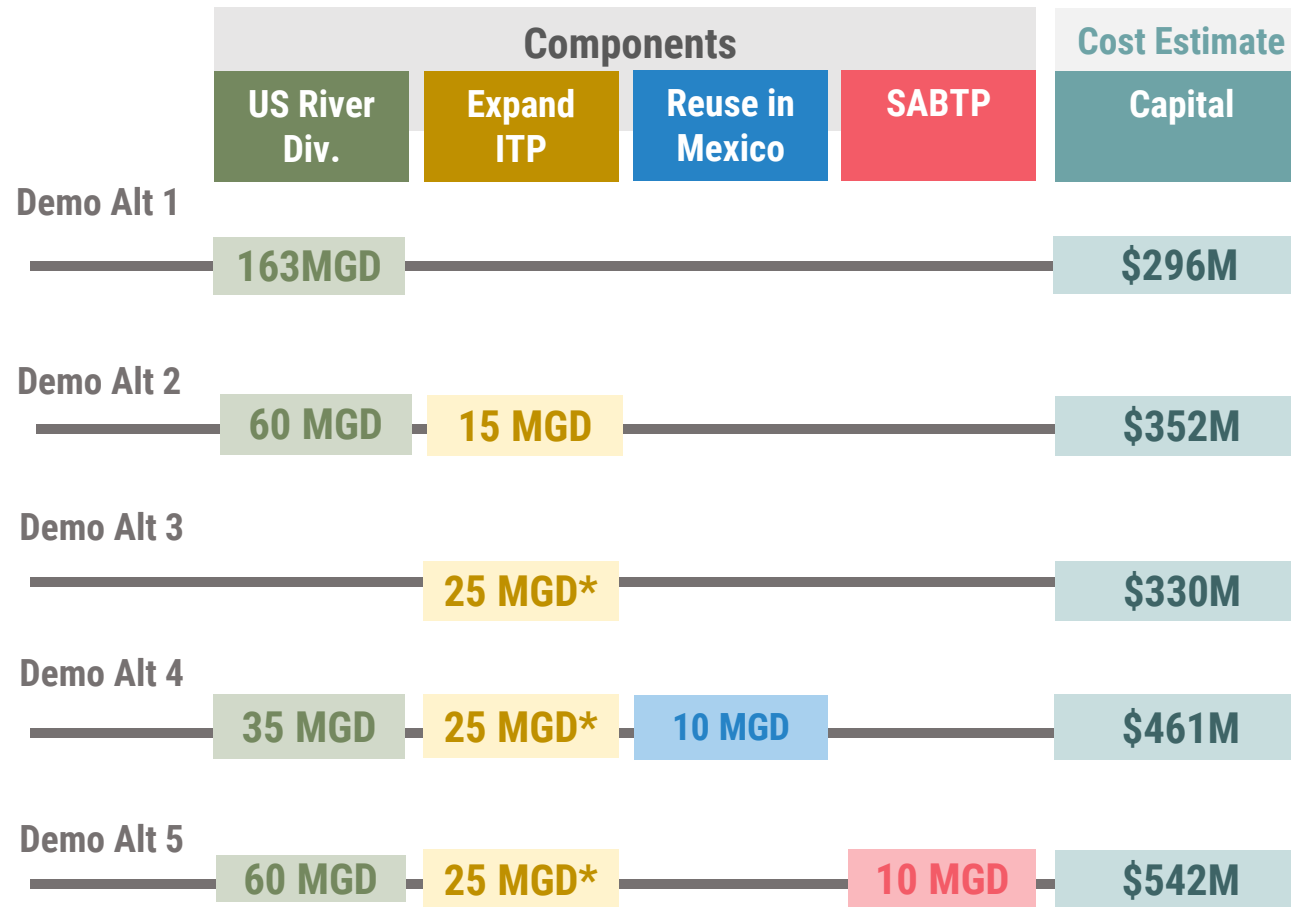
- An alternative is a grouping of one or more components from different projects
- Considering every potential alternative involving major wastewater treatment components
- Complementary components also included (e.g., trash capture booms)
- Feasibility, cost, and location assumptions:
 - Technically feasible
 - Most of USMCA funding to go to U.S. side solutions
 - May use BWIP funds for additional Mexico-side projects

Alternatives: Development Approach



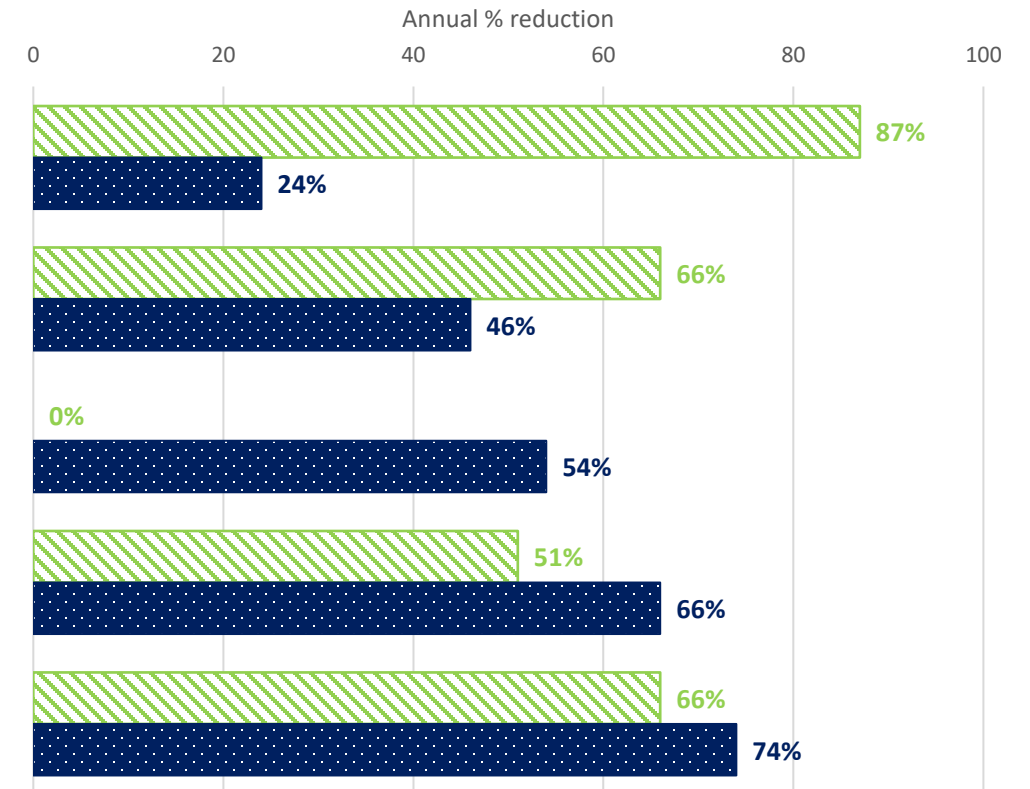
Demonstration Alternatives

Included for today's demonstration only.



* Including canyon flows

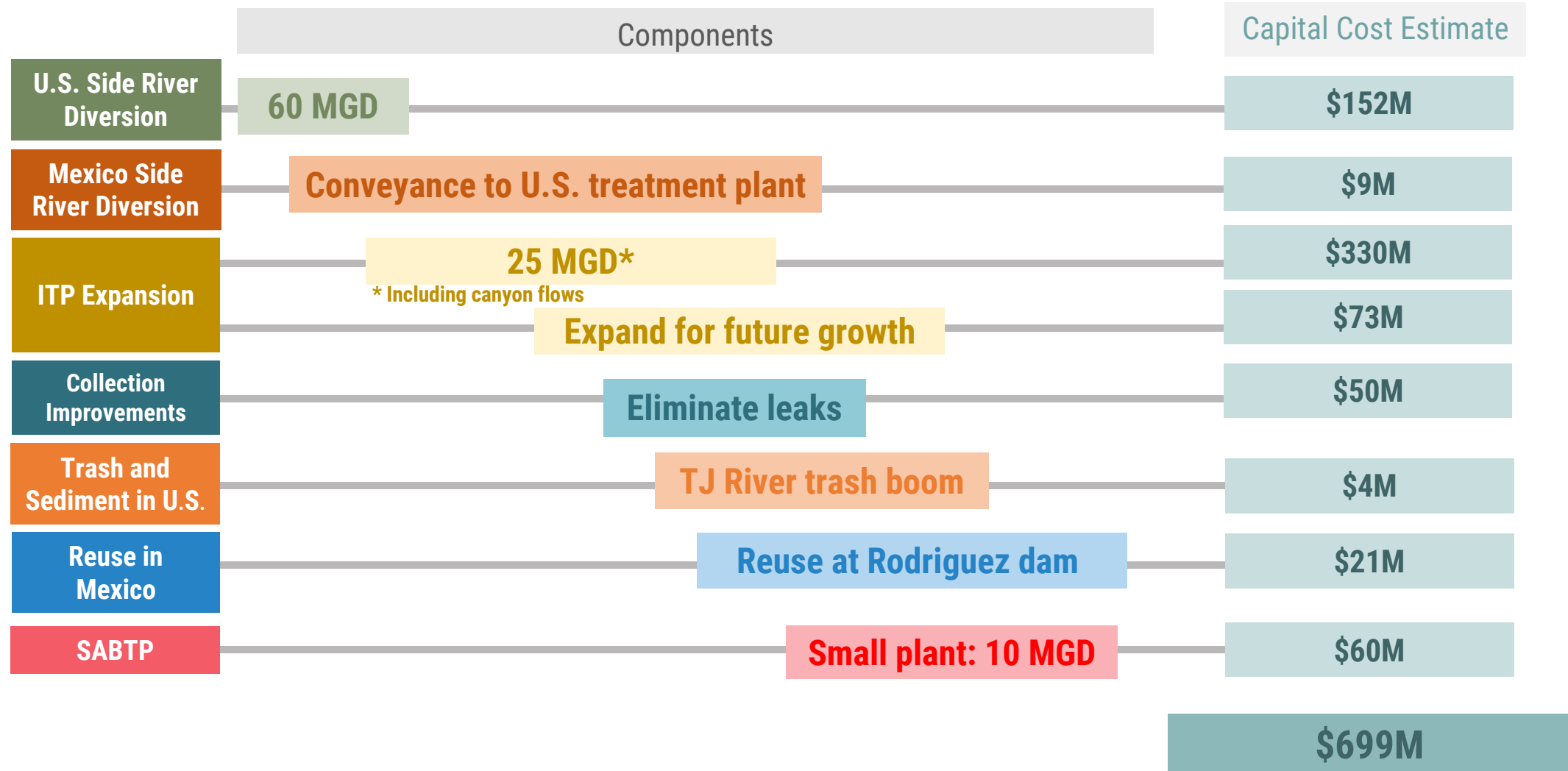
Preliminary Indicators



Main Channel Flow Frequency
 Coastal Impacts

Comprehensive Alternative Example

Included for today's demonstration only.



Part 2: Grouping Projects into Alternatives

Discussion & Questions?

Part 3: Method for Evaluating Alternatives

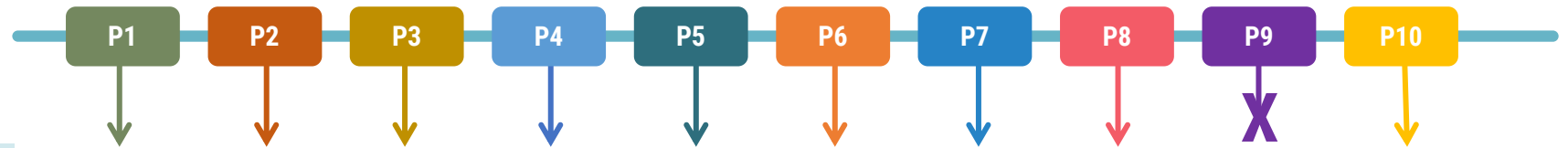
Overview & Discussion

Sarah Shadid, Ross Strategic

Technical Analysis: Process Overview

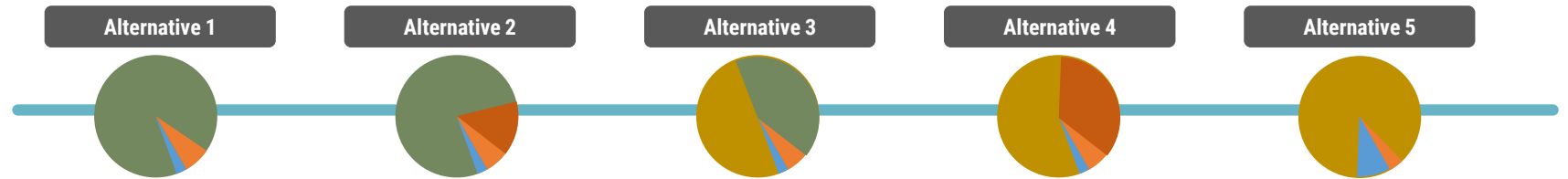
Project Feasibility Analysis

Refine & Assess Projects
(June 2021)



Alternatives Analysis

Identify Potential Alternatives
(June 2021)



Evaluate Alternatives
(July 2021)



Preferred Alternative

Refine/Optimize Alternatives
(July 2021)

Identify Preferred Alternative
(July-August 2021)

Along with 2 reasonable alternatives



Method for Evaluating Alternatives

- 1. Ground the evaluation in the USMCA Investment Goals**
2. Identify the importance of each goal relative to the others
3. Refine big picture goals to measurable metrics
4. Create a basis for comparison across metrics
5. Score alternatives against metrics for composite score

USMCA Project Investment Goals

**Public Health &
Community
Livability**

**Stewardship of
Public
Resources**

**Ecological
Protection**

**System
Resiliency**



**Public
Health &
Community
Livability**

**Stewardship
of Public
Resources**

**Ecological
Protection**

**System
Resiliency**

Method for Evaluating Alternatives

1. Ground the evaluation in the USMCA Investment Goals

- Based on the initial criteria list presented to EPECG Oct 16
- Operationalized with information gathered from:
 - Feasibility Assessments
 - EPECG Members
 - Public Meeting Discussions
 - Technical Experts
 - Previous Studies/Research

Method for Evaluating Alternatives

1. Ground the evaluation in the USMCA Investment Goals
- 2. Identify the importance of each goal relative to the others**
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What is the importance of each goal relative to the others?

Public Health & Community Livability

Stewardship of Public Resources

Ecological Protection

System Resiliency



Method for Evaluating Alternatives

1. Ground the evaluation in the USMCA Investment Goals
2. Identify the importance of each goal relative to the others
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How will each investment be evaluated against the goals?

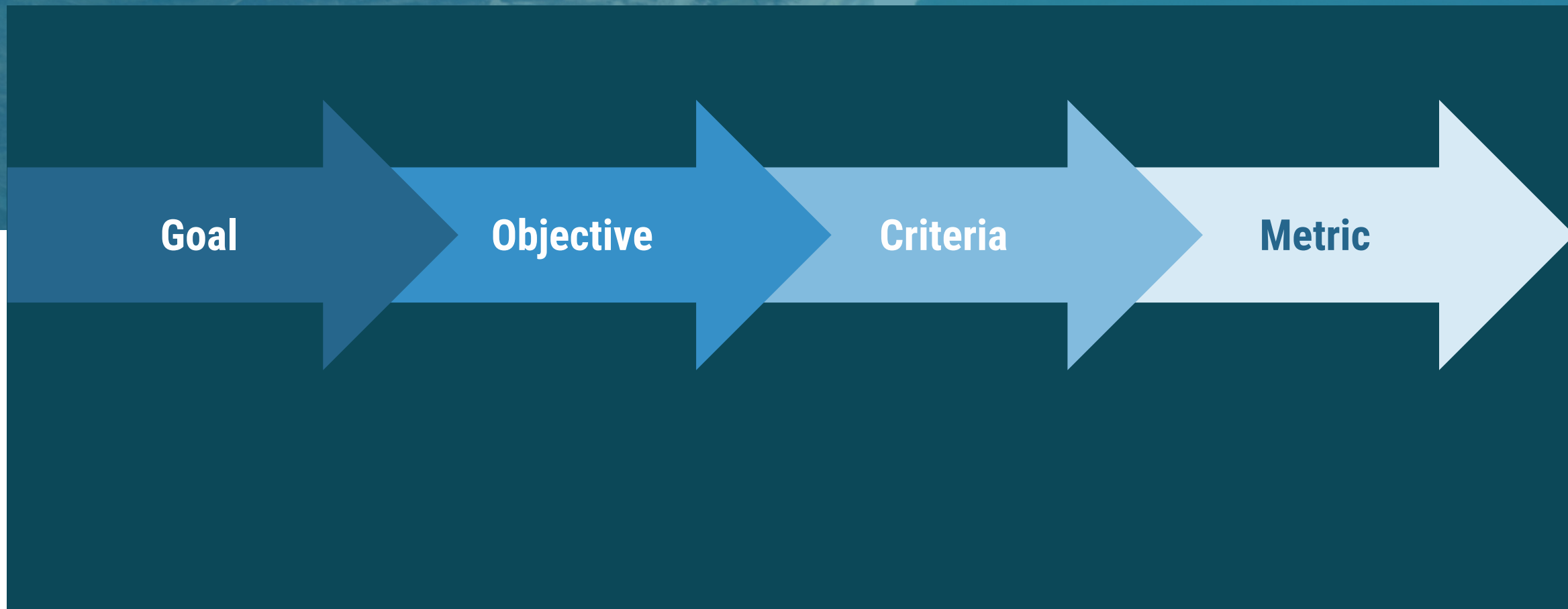
**Public Health &
Community
Livability**

**Stewardship of
Public
Resources**

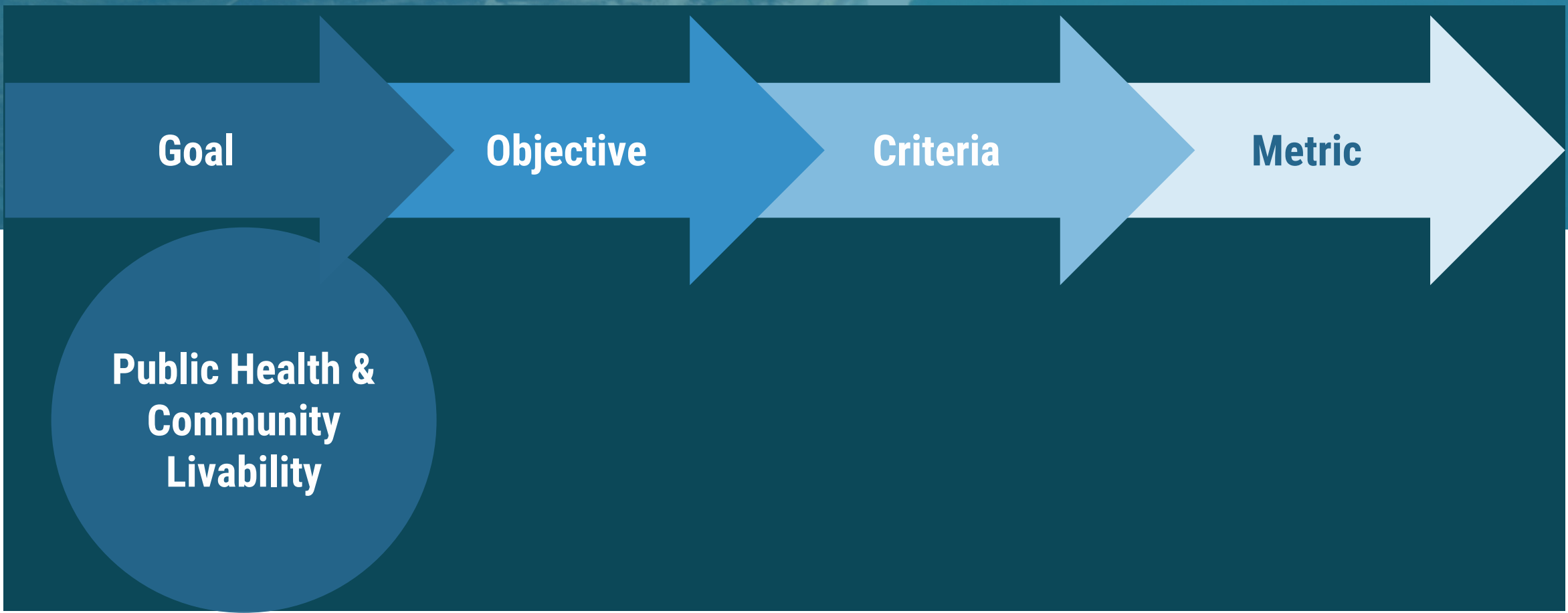
**Ecological
Protection**

**System
Resiliency**

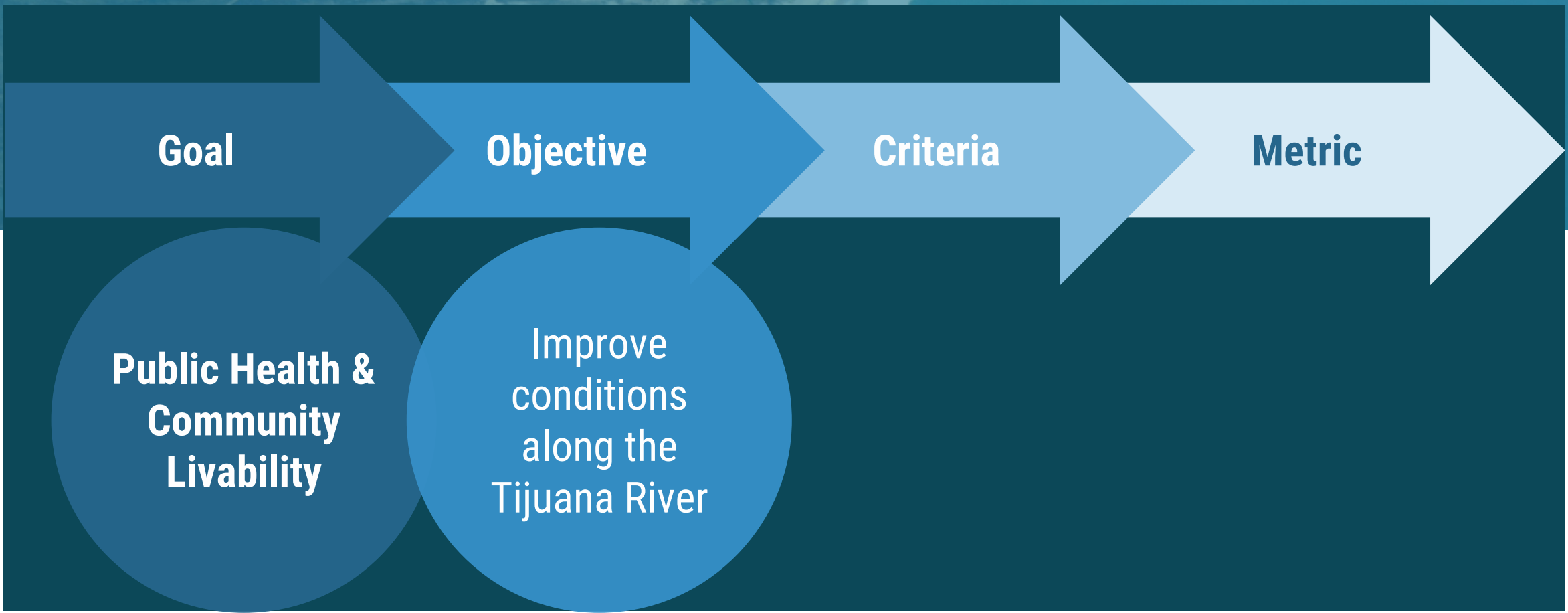
How will each investment be evaluated against the goals?



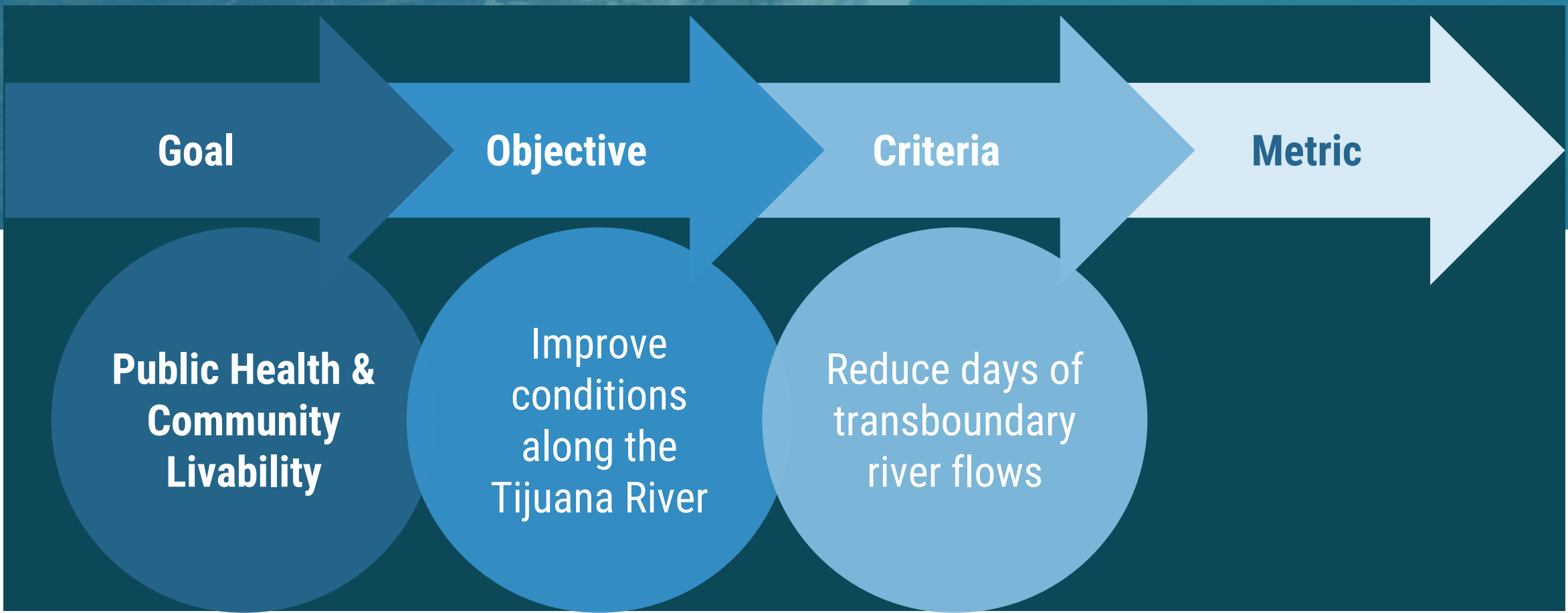
Example of the Goal to Metric Process



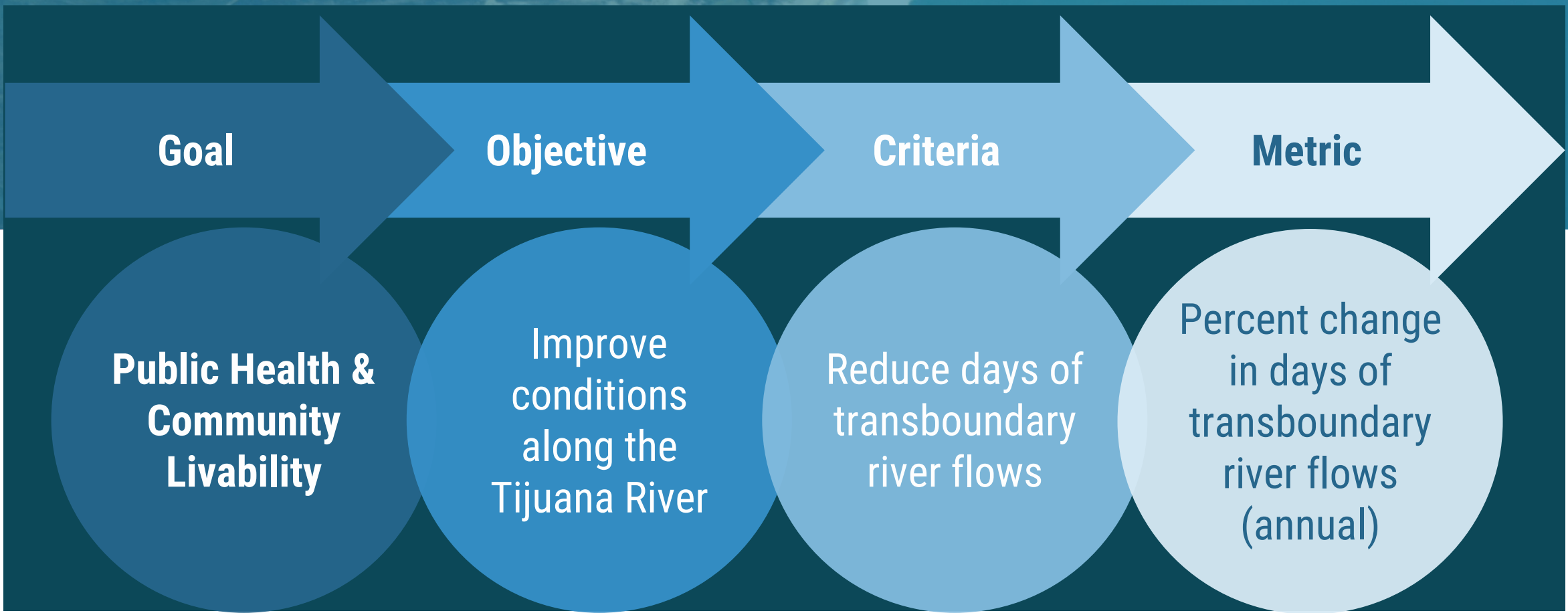
Example of the Goal to Metric Process



Example of the Goal to Metric Process



Example of the Goal to Metric Process



Each goal may have multiple objectives, criteria, and metrics

Public Health & Community Livability

Improve conditions along the Tijuana River

Improve water quality at U.S. beaches

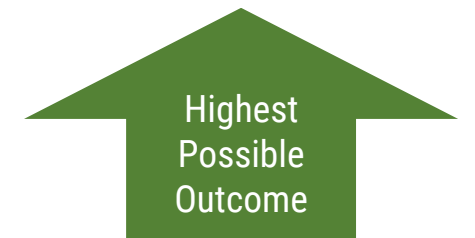
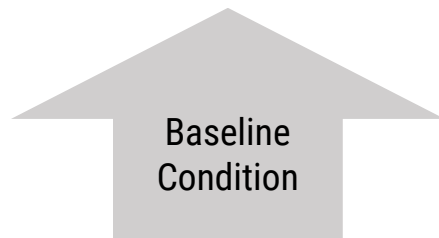
Alternatives Evaluation Process

1. Ground the evaluation in the USMCA Investment Goals
2. Identify the importance of each goal relative to the others
3. Refine big picture goals to measurable metrics
4. **Create a basis for comparison across metrics**
5. Score alternatives against metrics for composite score

A basis for comparison across metrics

Goal	Objective	Criteria	Metric
Public Health & Community Livability	Improve conditions along the Tijuana River	Reduce days of transboundary river flows	% change in days of transboundary river flows

-5	-4	-3	-2	-1	0	1	2	3	4	5
					0-20% reduction in days of transboundary river flows.	20-34% reduction in days of transboundary river flows.	35-49% reduction in days of transboundary river flows.	50-64% reduction in days of transboundary river flows.	65-79% reduction in days of transboundary river flows.	80-100% reduction in days of transboundary river flows.



Alternatives Evaluation Process

1. Ground the evaluation in the USMCA Investment Goals
2. Identify the importance of each goal relative to the others
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A basis for comparison across metrics

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Example Alternative A	2
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A basis for comparison across metrics

Goal	Objective	Criteria	Metric
Public Health & Community Livability	Improve conditions along the Tijuana River	Reduce days of transboundary river flows	% change in days of transboundary river flows

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Next Step: Evaluate Alternatives

Example Alternative A 2

Example Alternative B 1

Example Alternative C 5

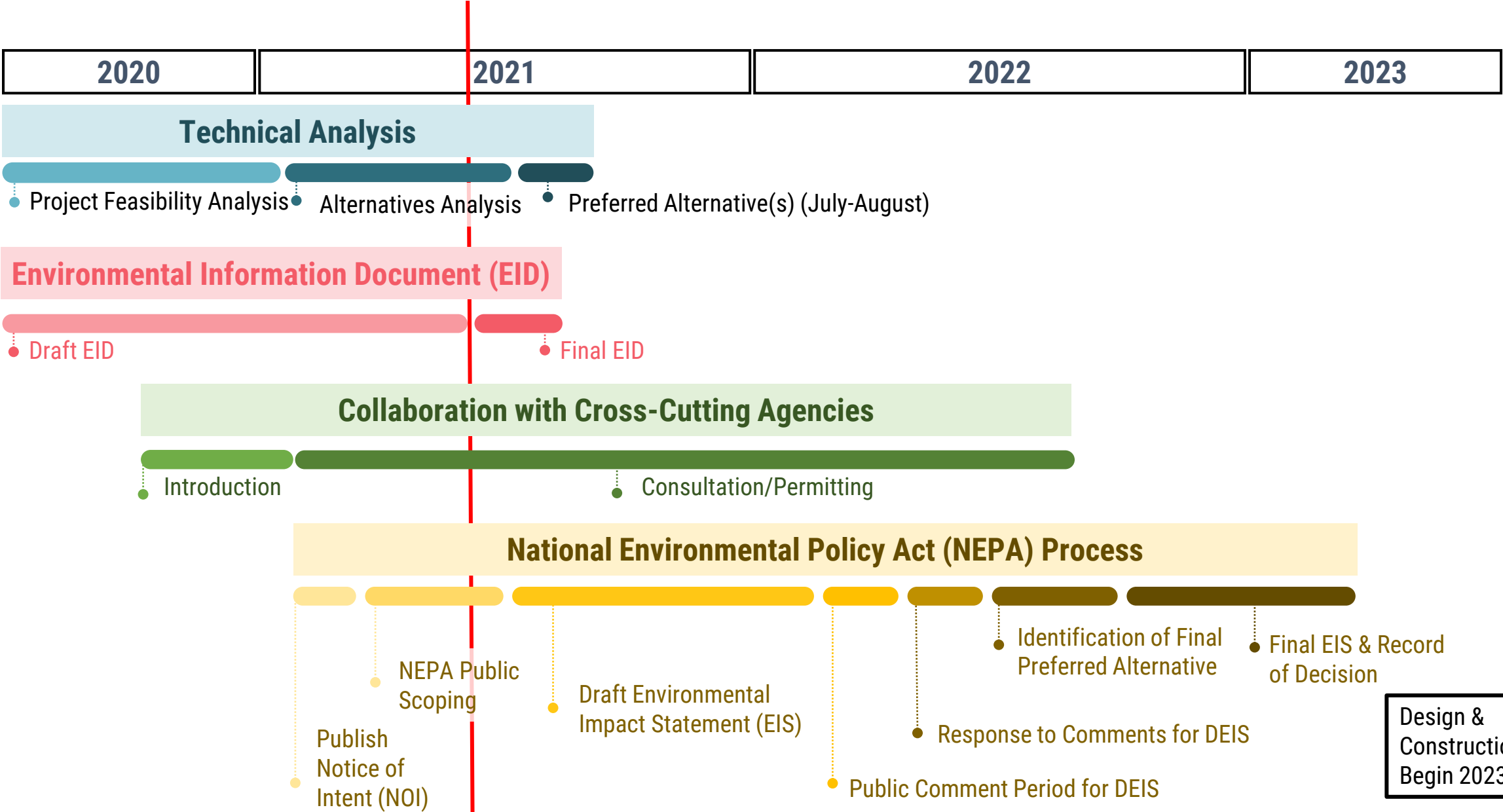
Part 3: Alternatives Evaluation Process

Discussion & Questions?

Next Steps & Upcoming Milestones

Tomás Torres, EPA Region 9

USMCA Process: Overview



Upcoming Milestones

- May 20: Last day for NEPA Public Scoping Period
- May 24: Public Meeting
- Finalize Additional Targeted Analyses of Specific Projects Per EPECG Request
- Score and Select Preferred Alternatives
- Prepare Draft Environmental Impact Statement

Next Steps & Upcoming Milestones

Questions?

Closing Remarks

Thank you!