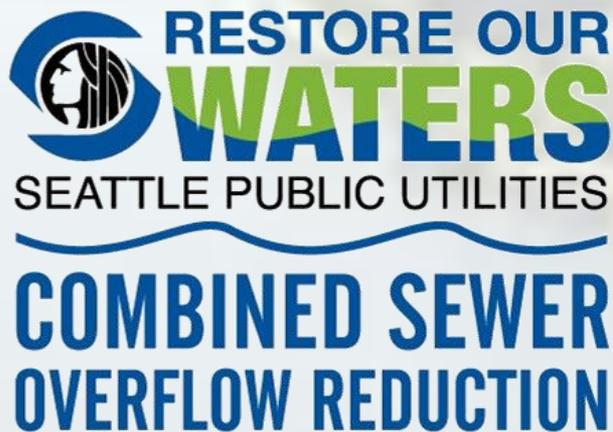


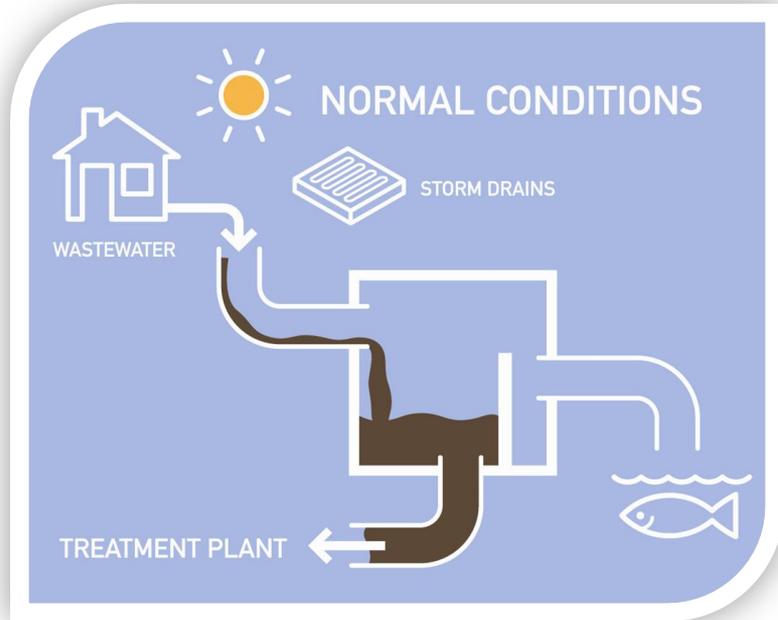
North Henderson Area Combined Sewer Overflow Reduction Projects



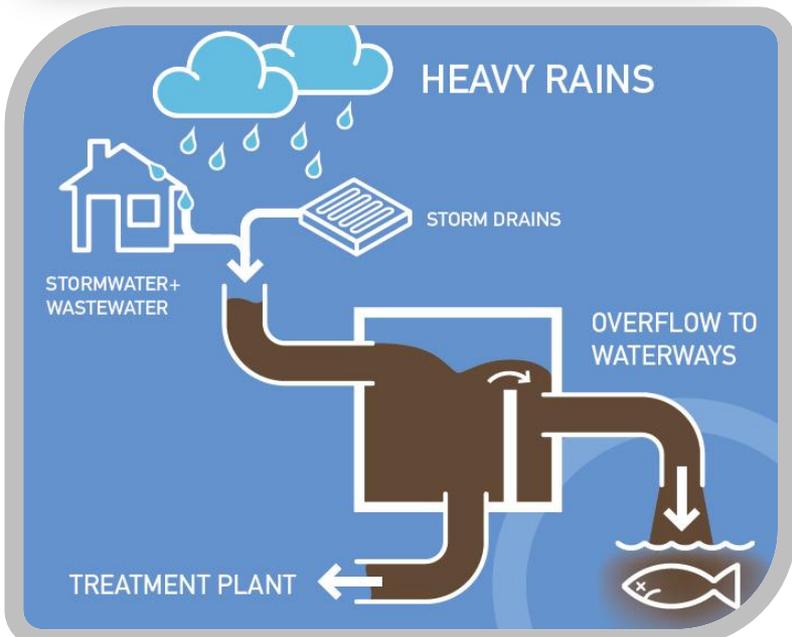
North Henderson
Community Meeting

March 10, 2011

What is a Combined Sewer Overflow?

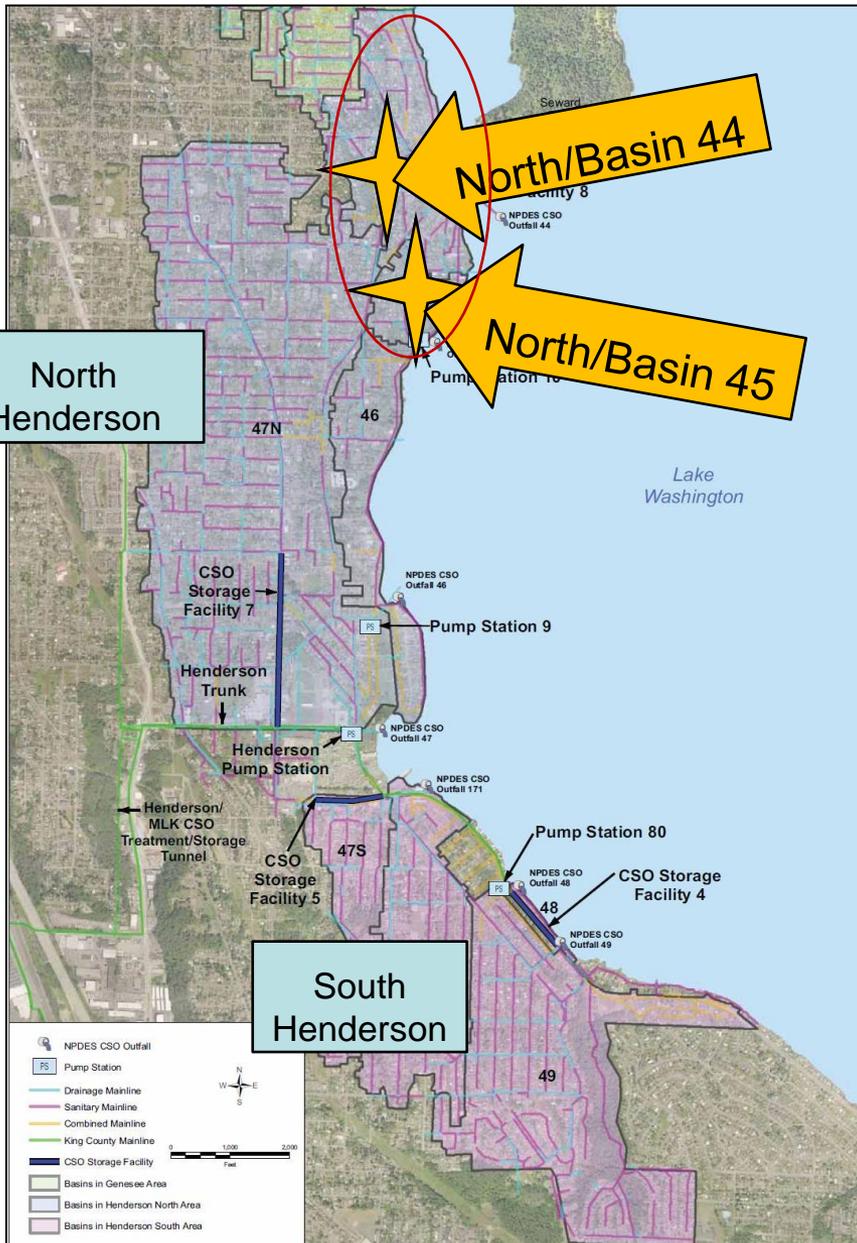


- Wastewater (from homes) and stormwater (from rooftops, streets) flow in a single pipe - a “combined sewer.”



- During heavy rains, stormwater (~90%) and sewage (~10%) exceed the system, causing a combined sewer overflow (CSO) into nearest waterway.

Henderson CSO Basins



- Top-Priority for CSO reduction
- 1,800 Acres
- Seven basins
- CSOs discharge approximately 17 times per year
- Construction projects to reduce CSOs must begin in 2015

North Henderson Workshops



November 18, 2010

- CSO reduction options (storage, transfer, separation, treatment)



December 14, 2010

- Site-specific CSO reduction alternatives



January 19, 2011

- Alternatives analysis using weighted evaluation criteria (*Multi-Objective Decision Analysis or MODA*)



March 10, 2011 (Today)

- Confirm feedback to date
- Present results of alternatives evaluation
- Confirm a short-list of alternatives

What We've Been Hearing

Programmatic Questions

- 💧 Is this project worth the investment?
- 💧 Will this project actually benefit water quality in Lake Washington?
- 💧 What is the decision-making process?
- 💧 What are the public's opportunities for input?

Technical Questions

- 💧 What will this facility look like, smell like, and sound like?
- 💧 What are the soil conditions in this area? How do they impact the facilities?

What We've Been Hearing

Technical Questions (continued)

- 💧 Can you provide more details on the costs of the various alternatives?
- 💧 What can we expect during construction? (noise, dust, access restrictions, etc.)
- 💧 What are the long-term maintenance requirements?

Community Preferences

- 💧 Desire to preserve character of parks and avoid impacts to Seward Park and Martha Washington Park
- 💧 Desire to have input into the design process

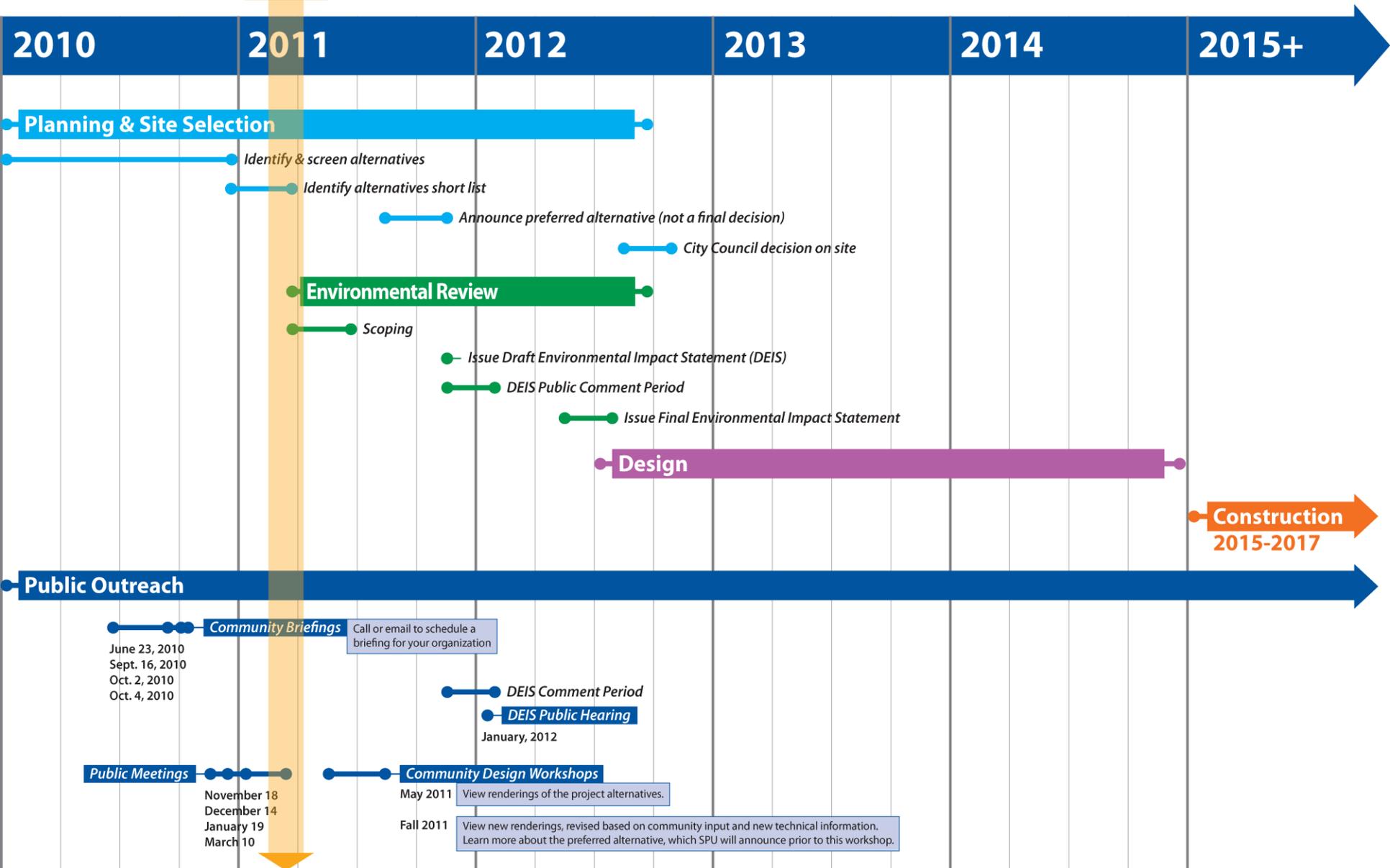
What We've Been Hearing

Community Preferences

- 💧 Desire to consider complete stormwater separation and/or innovative “green solutions” as either a partial or complete solution to the CSO problem
- 💧 Desire to NOT site the project on private property
- 💧 Lack of support for the tunnel alternative
- 💧 Concern about negative impacts on property values

North Henderson Project Schedule

We are here



Multi-Objective Decision Analysis (MODA)

Reduction Options-

- A decision aide **NOT** a decision maker

Rating of performance x Weight
= Decision Score

Public Weighting Results

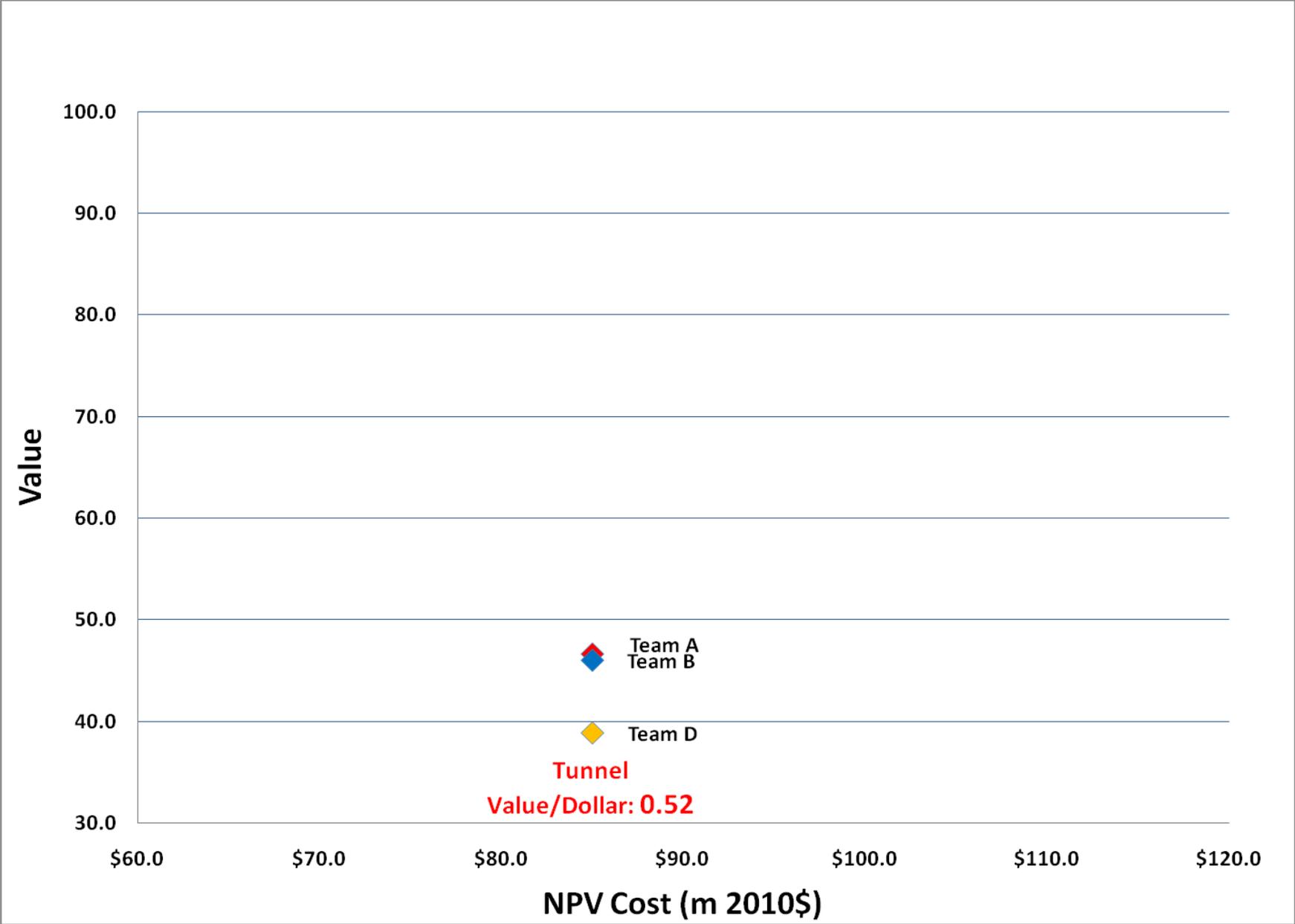
Non-Monetary Objectives

Weight

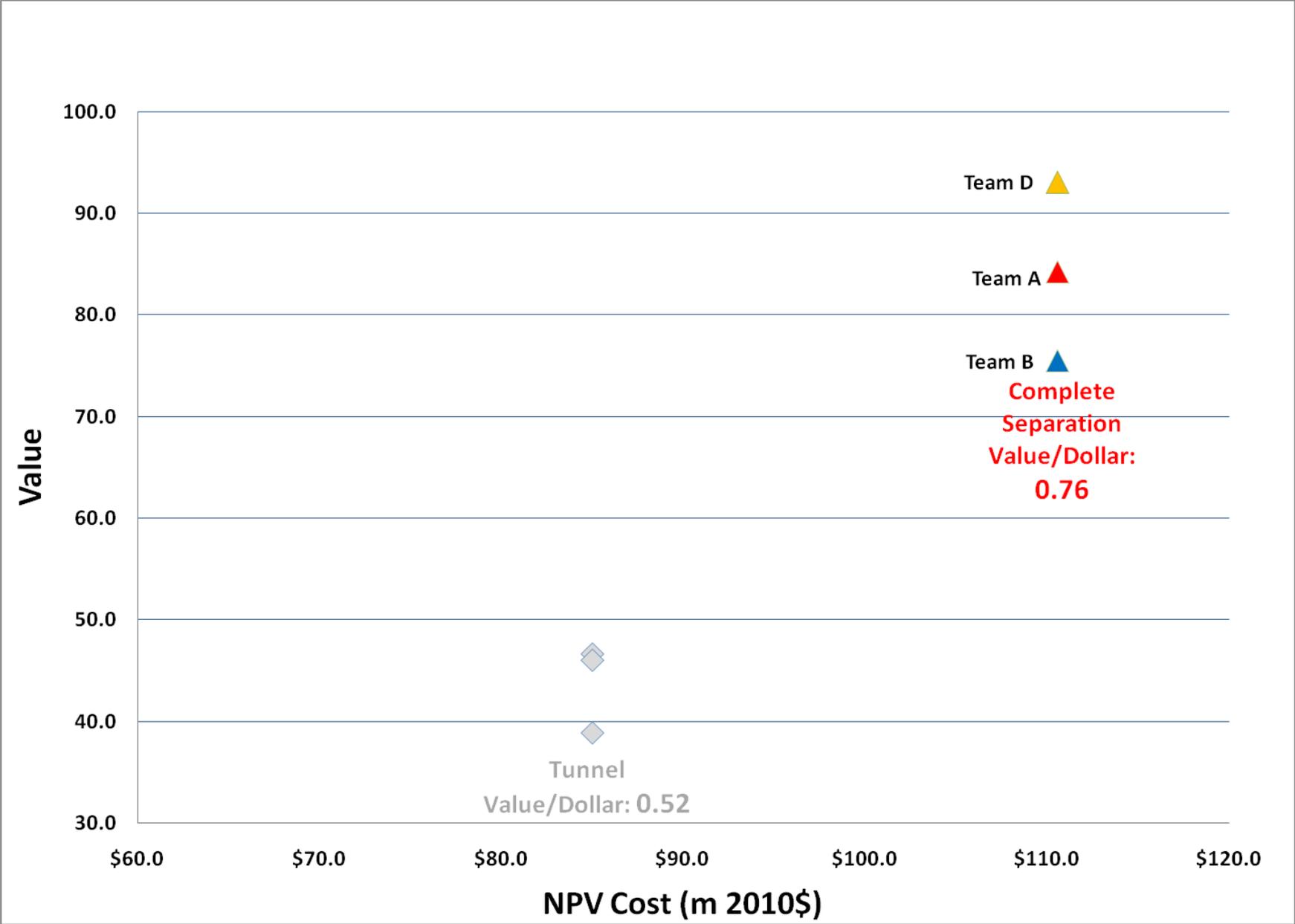
Increase open space in the neighborhood
Provide environmental benefit or limits impact to the environment
Limit short-term construction impacts
Preserve homes and private property
Preserve Park use and character of design
Limit impact from operation and maintenance

Team A	Team B	Team D
1%	0%	0%
16%	14%	23%
8%	25%	6%
53%	31%	55%
14%	22%	14%
8%	9%	2%

Option Scatter-plot



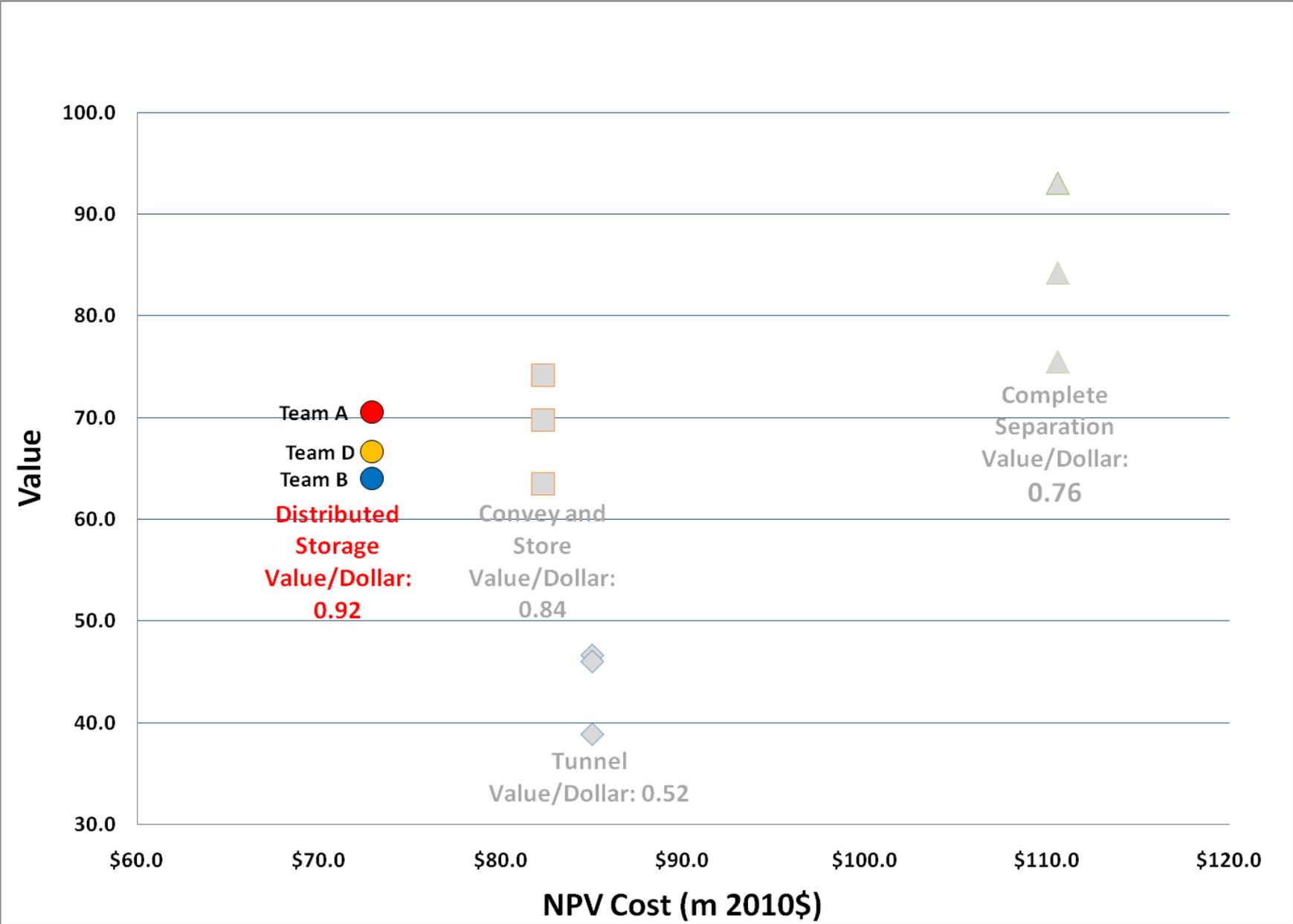
Option Scatter-plot



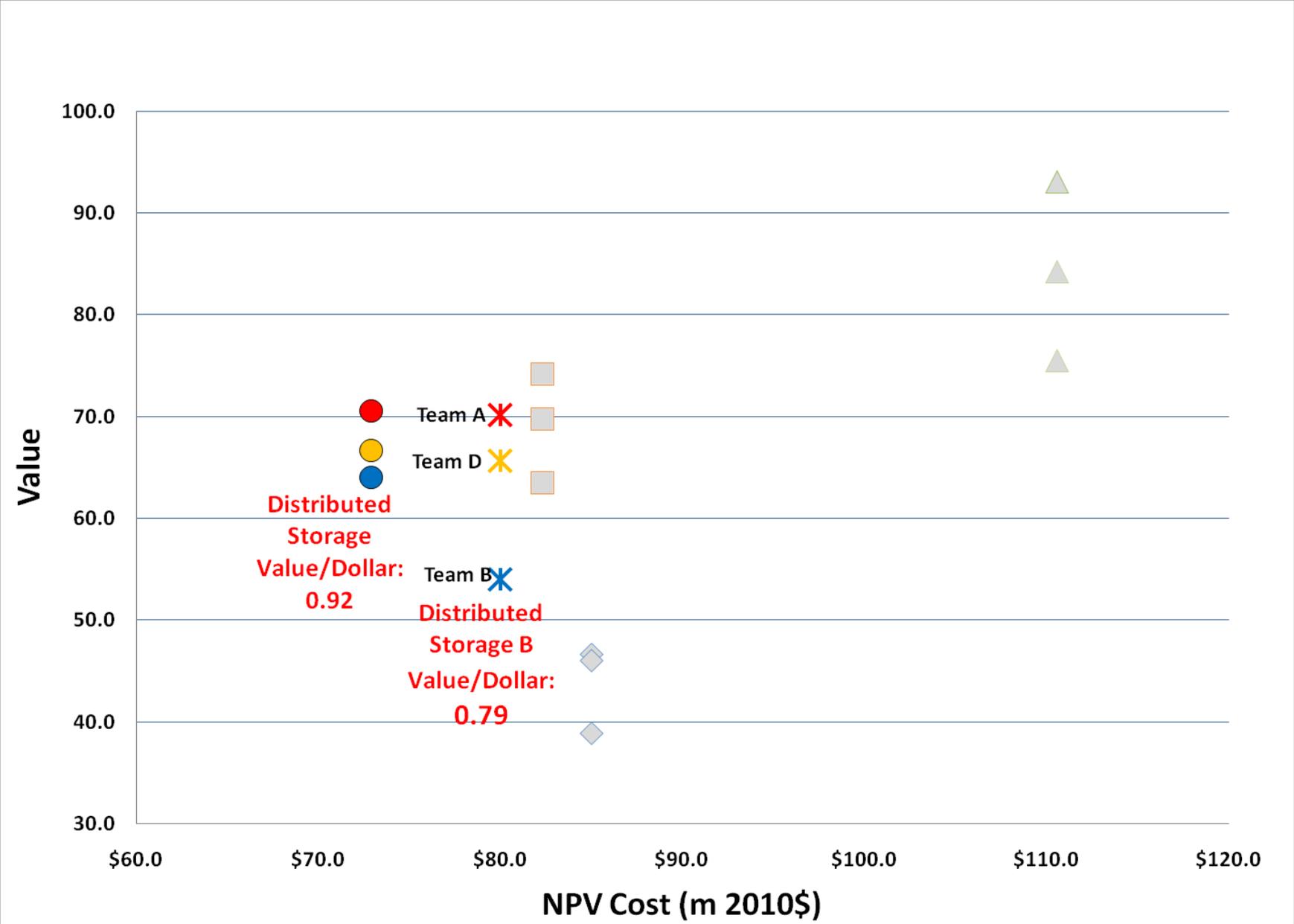
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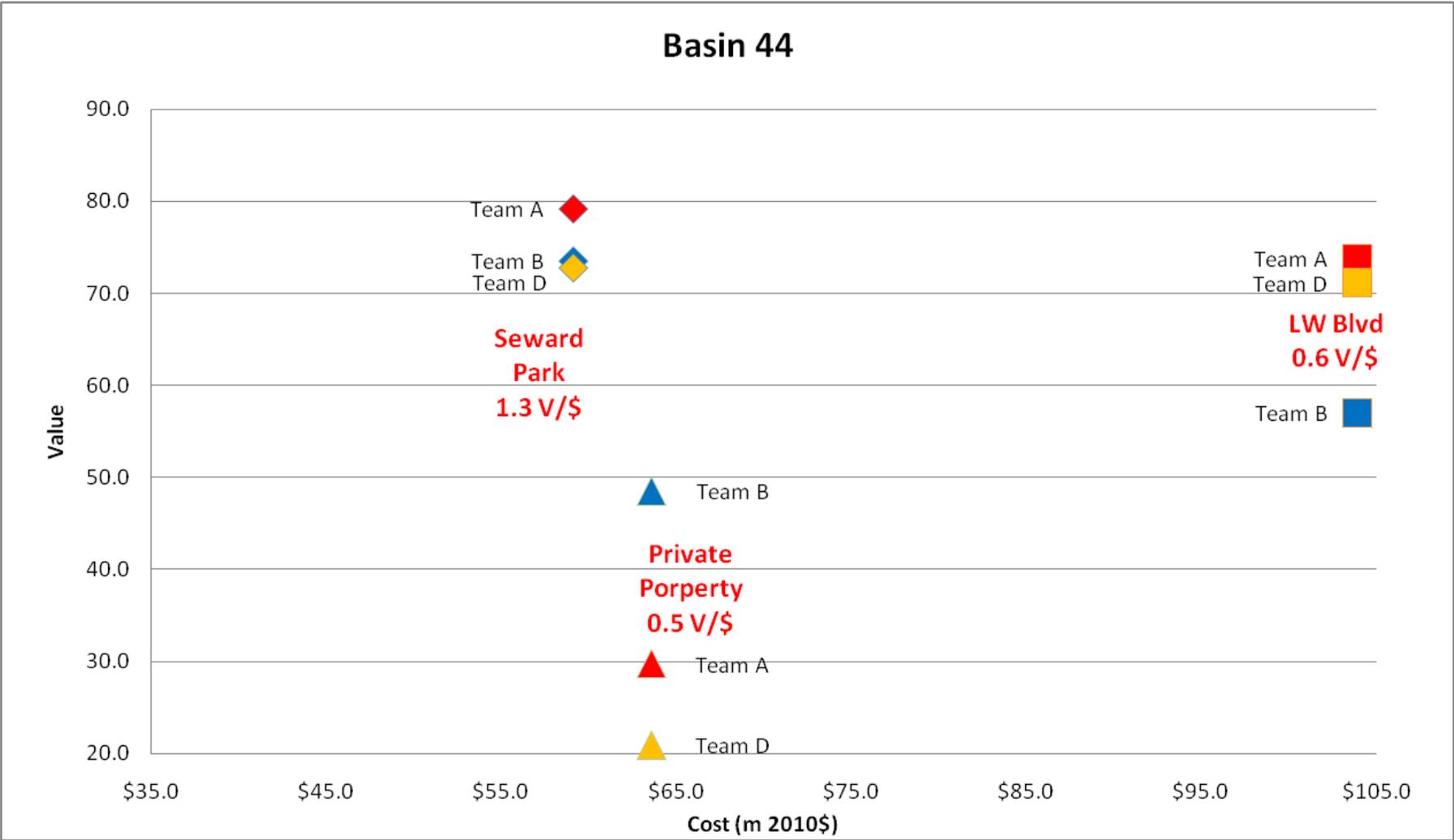
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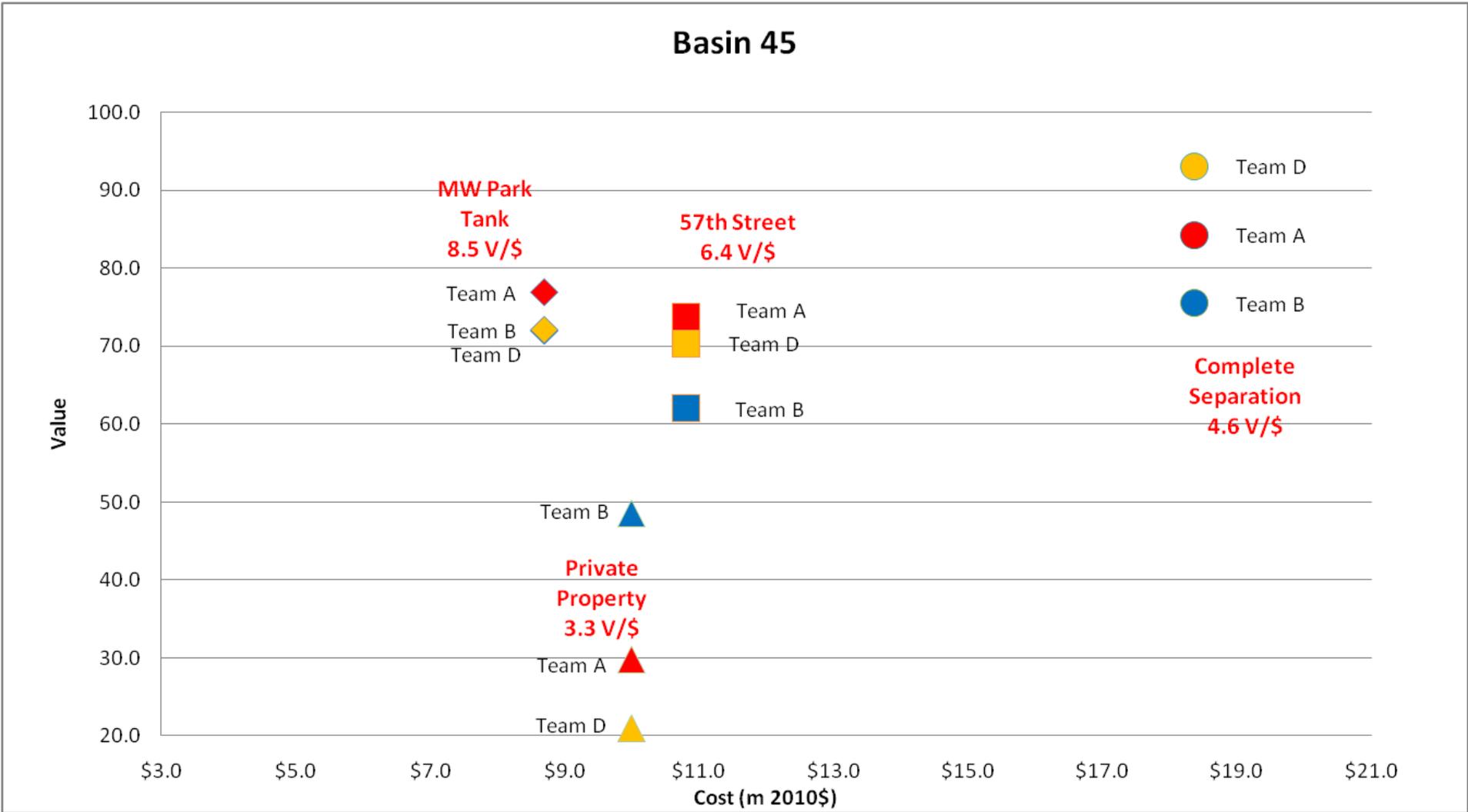
Option Scatter-plot



Basin 44 Scatter-plot



Basin 45 Scatter-plot



Summary of Alternatives

💧 Distributed Storage

- 💧 **Basin 44** (Storage under private property, Seward Park parking lot, or Lake Washington Blvd)
- 💧 **Basin 45** (Storage under private property, Martha Wahsington Park open space, or 57th Ave S.)

💧 Tunnel Storage

💧 Conveyance and Storage

💧 Complete Sewer Separation (*includes Inflow & Infiltration Reduction*)

Next Steps

- 💧 Design Charettes (*Spring/Summer 2011*)
- 💧 EIS Scoping Notification (*Spring 2011*)
- 💧 Draft EIS and Announcement of Preferred Alternative (*Fall/Winter 2011*)

Contact Information

Project updates will be sent ongoing to those that signed up to be on the listserv
(sign-up in back)

**PLEASE SEND US YOUR COMMENTS
AND QUESTIONS:**

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206-826-4767

www.seattle.gov/CSO