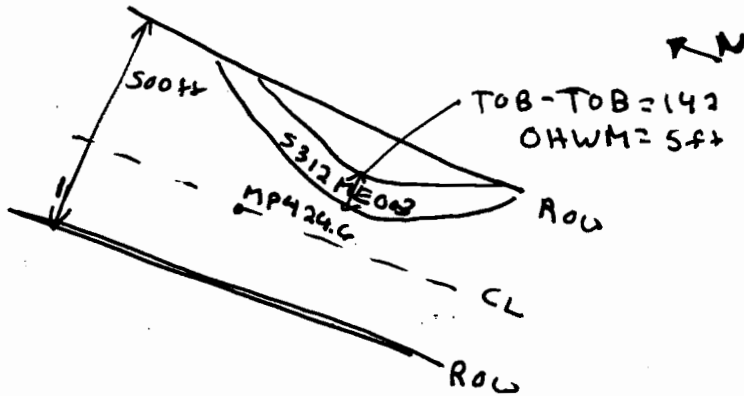


## Waterbody Data Form

Centerline
  Re-Route
  Access Road
  Ancillary Facility
  Transmission Line
  Other

Centerline ID: <b>S312ME003</b>		Project Designated Name: <b>Norcelle Creek</b>	
Date: <b>10-5-12</b>	Client/Project Name: <b>Keystone XL</b>		Milepost Enter/Exit: <b>424.6</b>
Team: <b>312</b>	State/County: <b>SD/ME</b>		Quad Name:
Logbook No.: <b>1</b>	Logbook Page No.:	Tract No.: <b>ML-SD-ME-01170.000</b>	

Drawing (Please provide orientation arrow, all features identified, location to centerline, etc.)



Waterbody Type:	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> Borrow Pit <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ag. Ditch <input type="checkbox"/> Other
Stream Flow:	<input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input type="checkbox"/> Slow <input type="checkbox"/> Very Slow <input checked="" type="checkbox"/> None
Flow Type:	<input checked="" type="checkbox"/> Perennial (Flows year round) <input checked="" type="checkbox"/> Intermittent (Flows <3 month) <input type="checkbox"/> None
	<input checked="" type="checkbox"/> Seasonal (Continuous flow ≥ 3 months) <input type="checkbox"/> Ephemeral (Flows only in response to rainfall)
Direction of Flow:	<input type="checkbox"/> N <input type="checkbox"/> NE <input type="checkbox"/> E <input type="checkbox"/> SE <input checked="" type="checkbox"/> S <input type="checkbox"/> SW <input type="checkbox"/> W <input type="checkbox"/> NW <input type="checkbox"/> No Flow
OHWM Width (ft.):	<b>25 feet</b>
Sinuosity:	<input type="checkbox"/> Braided <input checked="" type="checkbox"/> Meandering <input type="checkbox"/> Straight <input type="checkbox"/> N/A
Stream Width (ft.):	<b>142 feet</b>
	Water Surface (At Crossing Location) <b>0</b>
Stream Depth (ft.):	<input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1-3 <input type="checkbox"/> 3-6 <input type="checkbox"/> 6-12 <input type="checkbox"/> 12-18 <input type="checkbox"/> 18-24 <input type="checkbox"/> 24-36 <input type="checkbox"/> 36-48 <input type="checkbox"/> 48-60 <input type="checkbox"/> 60+
OHWM Indicators:	<b>bare banks</b>
Bank Height (ft.): (Looking Downstream)	Left: <input type="checkbox"/> 0-2 <input type="checkbox"/> 2-4 <input checked="" type="checkbox"/> 4-6 <input type="checkbox"/> 6-8 <input type="checkbox"/> 8+ Right: <input type="checkbox"/> 0-2 <input type="checkbox"/> 2-4 <input checked="" type="checkbox"/> 4-6 <input type="checkbox"/> 6-8 <input type="checkbox"/> 8+
Bank Slope: (Looking Downstream)	Left: <input type="checkbox"/> 4:1 <input checked="" type="checkbox"/> 3:1 <input type="checkbox"/> 2:1 <input type="checkbox"/> 1:1 <input type="checkbox"/> Vertical Right: <input type="checkbox"/> 4:1 <input type="checkbox"/> 3:1 <input type="checkbox"/> 2:1 <input type="checkbox"/> 1:1 <input checked="" type="checkbox"/> Vertical

Qualitative Attributes

Water Appearance:

<input type="checkbox"/> Clear	<input type="checkbox"/> Turbid	<input type="checkbox"/> Sheen on Surface	<input type="checkbox"/> Floating Algal Mats
<input type="checkbox"/> Slightly Turbid	<input type="checkbox"/> Very Turbid	<input type="checkbox"/> Greenish Color	<input type="checkbox"/> Obvious Surface Scum
<input type="checkbox"/> No Flow	<input type="checkbox"/> Other:		

Stream Substrate %:

Aquatic Habitats:

<input type="checkbox"/> Sand Bar	<input type="checkbox"/> Gravel Riffle	<input type="checkbox"/> In-stream Emergent Plant % Cover:
<input type="checkbox"/> Gravel Bar	<input type="checkbox"/> Deep Pools	<input type="checkbox"/> In-stream Submerged Plant % Cover:
<input type="checkbox"/> Mud Bar	<input type="checkbox"/> Bank Root Systems	<input type="checkbox"/> Fringing Wetlands Characteristics:
<input type="checkbox"/> Undercut Banks	<input type="checkbox"/> Overhanging Trees/Shrubs	<input type="checkbox"/> None

Aquatic Organisms Observed:

Riparian Zone:

Width of Natural Vegetation Zone from Edge of Active Channel out to Flood Plain (ft): Left - 50+ Right - 50+

Vegetative Layers:  Herbs  Shrubs  Trees  Multiple

Significant Bare Areas Within Riparian Zone  Yes  No  Unknown

Evidence Of Non-Buffered Concentrated Flows:  Yes  No  Unknown

Tributary Condition:  Natural  Artificial (Man-Made)  Manipulated — upstream

Channel Condition:

<input type="checkbox"/> Channelization/Braiding	<input type="checkbox"/> Unnatural Straightening	<input type="checkbox"/> Downcutting
<input type="checkbox"/> Dikes/Berms	<input type="checkbox"/> Excessive Bank Erosion	<input type="checkbox"/> N/A

Disturbances:

<input checked="" type="checkbox"/> Livestock Access to Riparian Zone	<input checked="" type="checkbox"/> Manure In Stream or On Banks
<input type="checkbox"/> Waste Discharge Pipes Present	
<input type="checkbox"/> Other:	

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Habitat ID Number:

- rangeland

Comments:

- stream not manipulated in corridor, but was manipulated upstream

Stream Quality:  High  Moderate  Low

- cattle access, erosion, manipulation upstream