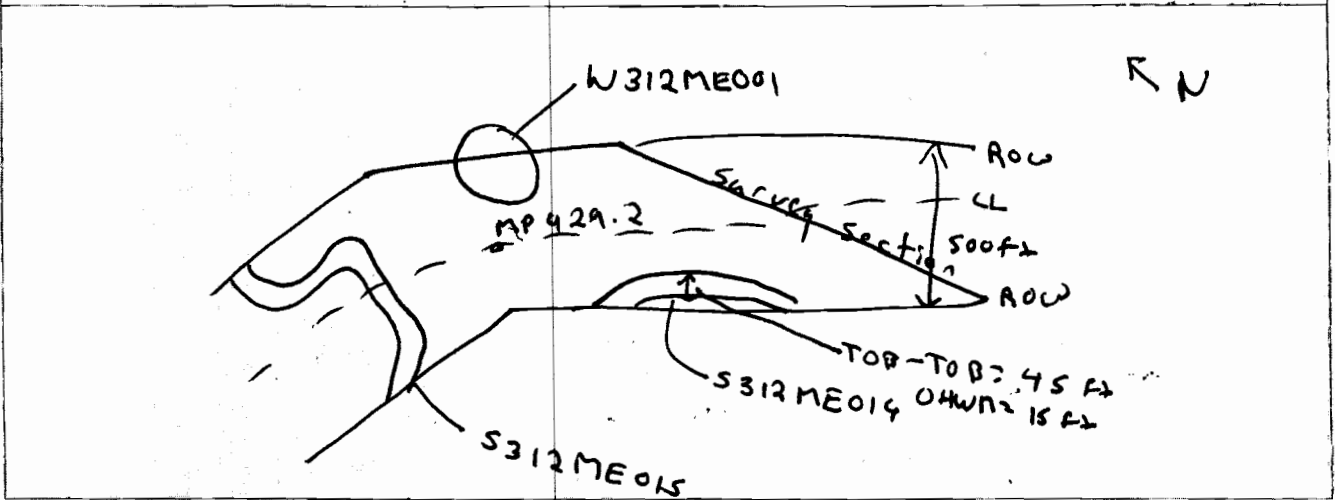


Waterbody Data Form

Centerline
 Re-Route
 Access Road
 Ancillary Facility
 Transmission Line
 Other

Centerline ID: S312ME014		Project Designated Name: tributary	
Date: 10-6-12	Client/Project Name: Keystone XL	Milepost Enter/Exit: 429.2	
Team: 312	State/County: SD / ME	Quad Name:	
Logbook No.: 1	Logbook Page No.:	Tract No.: ML-SD-ME-01240.000 ; AR-SD-ME-01250.000	

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 type="checkbox"/> Perennial (Flows year round) <input checked="" type="checkbox"/> Intermittent (Flows <3 month) <input type="checkbox"/> None <input 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 type="checkbox"/> S <input type="checkbox"/> SW <input type="checkbox"/> W <input type="checkbox"/> NW <input checked="" type="checkbox"/> No Flow
OHWM Width (ft.):	15 ft
Sinuosity:	<input type="checkbox"/> Braided <input checked="" type="checkbox"/> Meandering <input type="checkbox"/> Straight <input type="checkbox"/> N/A
Stream Width (ft.):	4.5 ft
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:	bare banks
Bank Height (ft.): (Looking Downstream)	Left: <input type="checkbox"/> 0-2 <input type="checkbox"/> 2-4 <input type="checkbox"/> 4-6 <input type="checkbox"/> 6-8 <input checked="" type="checkbox"/> 8+ Right: <input type="checkbox"/> 0-2 <input type="checkbox"/> 2-4 <input type="checkbox"/> 4-6 <input type="checkbox"/> 6-8 <input checked="" type="checkbox"/> 8+
Bank Slope: (Looking Downstream)	Left: <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 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

Channel Condition:

<input checked="" type="checkbox"/> Channelization/Braiding	<input type="checkbox"/> Unnatural Straightening	<input checked="" 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:

- severe downcutting

Stream Quality: High Moderate Low

- cattle access ; severe downcutting