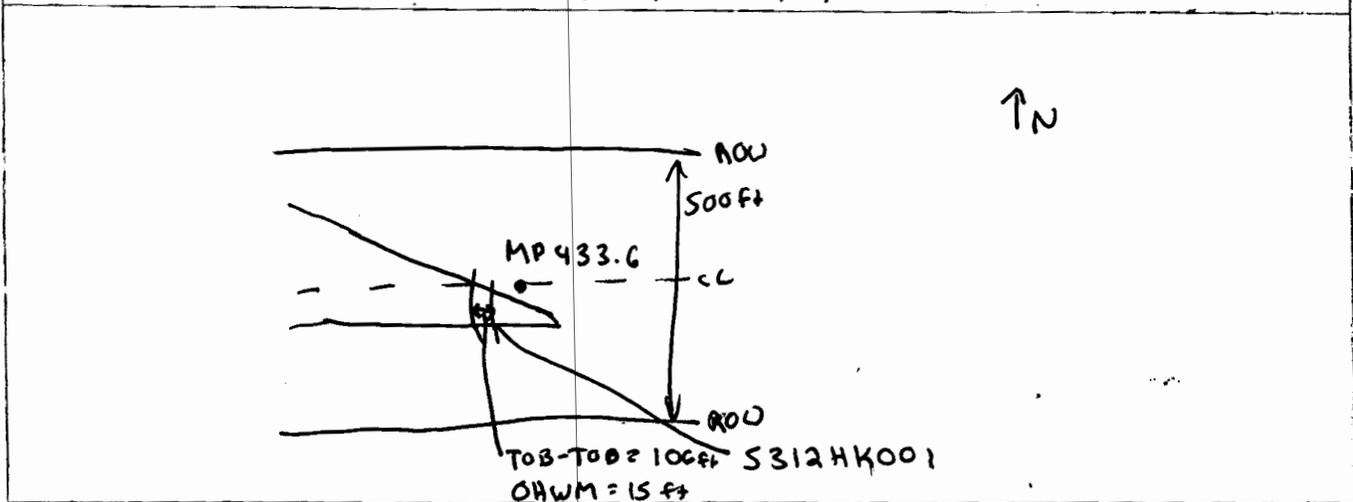


Waterbody Data Form

Centerline
 Re-Route
 Access Road
 Ancillary Facility
 Transmission Line
 Other

Centerline ID: 5312HK001		Project Designated Name: Bridger Creek	
Date: 10-8-12	Client/Project Name: Keystone XL	Milepost Enter/Exit: 433.6	
Team: 312	State/Country: SD/HK	Quad Name:	
Logbook No.: 1	Logbook Page No.:	Tract No.: ML-SD-HK-00110.000	

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.):	106 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: <input type="checkbox"/> Herbs <input type="checkbox"/> Shrubs <input type="checkbox"/> Trees <input checked="" type="checkbox"/> Multiple Significant Bare Areas Within Riparian Zone <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown Evidence Of Non-Buffered Concentrated Flows: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown	
Tributary Condition: <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial (Man-Made) <input type="checkbox"/> Manipulated	
Channel Condition: <input checked="" type="checkbox"/> Channelization/Braiding <input type="checkbox"/> Unnatural Straightening <input type="checkbox"/> Downcutting <input checked="" 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: - likely dry only due to recent drought	
Stream Quality: <input type="checkbox"/> High <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Low - cattle access	