

SITE NUMBER: B-235R-01 (was B-R4-02)
LOCAL NAME: West Mill Creek Springs - Bordi Pond
WRIA: 20.0235A

NORTH COAST OFF CHANNEL SITE INVENTORY DATA

RIVER SYSTEM: Bogachiel **DATE:** 4/12/89 **OBSERVER:** Young

CHANNEL TYPE: Terrace tributary (spring channel)

TRIBUTARY TO: Mill Creek - 20.0235

SITE LOCATION: R.B. @ River mile - 0.35 (field notes)

LEGAL DESCRIPTION: SE1/4 S18 T28N R13W

	UPPER END	LOWER END	RIVER TEMP
WATER TEMP:	49 F	49 F	44 F
FLOW (CFS):	0.0	3 - 5	

SUBSTRATE TYPE: Considerable amounts of gravel in the lower 200 to 250 m of the channel. Silt and silty gravel in the middle reaches. Mostly silt from the pond upstream.

SITE SIZE: Length- 650 m
Width- Surface = 8 to 30 ft (excluding pond)
Channel = 10 to 30 ft (excluding pond)
Depth- 4 - 6 inches. Pools to 1 ft. (excluding pond)

WATER SOURCE: Numerous large springs.

DIRECTIONS TO SITE: Head north on Hwy 101 to the town of Forks. Turn left at B Street SE (just past the Pay and Save Grocery). In two or three blocks B St SE veers to the left and becomes Bogachiel Way. Stay on Bogachiel Way for approx. 2 miles until the road makes a hard left. Continue past a large housing addition to the bottom of the grade. Turn left at the River Inn sign (first driveway at the bottom of the hill). Halfway down the driveway an old grade takes off to the east across a fairly recent clearcut. Follow the old grade (by foot) to the eastern edge of the clearcut. Work north and east until coming to another old grade that runs along the base of a high terrace wall. Continue east until coming to the pond in channel B-235R-01.

FISH ACCESS AND CURRENT USE: B-235R-01 has unrestricted fish access and appears to be utilized by coho and steelhead for both spawning and rearing. Flags indicate spawner surveys have been done here. Many 1+ salmonids were seen hitting the surface of the pond near the upper end of the channel (see pond data supplement). With its abundance of spring water, B-235R-01 should also be an excellent summer rearing area.

FLOODING POTENTIAL: Very low.

LANDOWNER: Joel Dahlgren

COMMENTS & RECOMMENDATIONS: B-235R-01 is a true spring channel and has an exceptionally good flow. The upper end of the channel is located in a small, narrow draw. A profusion of springs is seen in the lower end of this draw. Most of the springs emanate from the base of the 50 ft terrace wall along the right bank. A large housing addition (20 or 30 residences) is situated on the terrace above the springs. A small pond is located at the mouth of the draw, about 180 m downstream of the "headwaters" (see pond data supplement).

Downstream of the pond the channel maintains a gentle to moderate gradient. Some excellent spawning areas are seen in the mid and lower reaches.

A second smaller spring channel (see B-235R-02) enters B-235R-01 along its left bank some 370 m downstream of the pond and about 50 m above its confluence with Mill Creek. At the time of this survey it appeared that about 50% of the water in lower Mill Creek was coming from the B-235R-01 channel.

It may be possible to enhance the rearing habitat that is already available in the pond (see pond supplement). Excavation of additional ponded areas both upstream and downstream of the present pond may also be feasible.

POND NAME: Bordie's Pond **POND DATA SUPPLEMENT**

DATE: 4/12/89 **OBSERVER:** Young

INLET OUTLET

WATER TEMPERATURE: 49 F 50 F

POND SIZE: (about 0.4 acres)

LENGTH - 45 m

WIDTH - 45 m

EST. MAXIMUM DEPTH - > 3 ft

(If dry est. depth from high water mark on bank)

WATER SOURCE: Large springs.

FISH ACCESS & CURRENT USE: Several 1 + salmonids were seen hitting the surface of the pond. Pond is probably utilized for both summer and winter rearing.

TYPE & AMOUNT OF IN POND COVER: Most cover appears to be provided by aquatic vegetation. Water depth may also provide cover.

COMMENTS & RECOMMENDATIONS: This small, nearly circular pond seems to provide an excellent rearing area for juvenile salmonids. While the maximum depth appears to be > 3 ft, a large portion of the pond seems to be in the 2 to 3 ft range. The water in the pond is very clear and quite cool. The healthy flow of water through the pond (> 3 cfs) helps to maintain the high water quality. The substrate is a very fine, light gray silt (as is often associated with high quality spring areas). This substrate layer is quite deep in places. Most cover seems to be provided by aquatic vegetation. Bird predation may be a problem. A small cascade at the outlet of the pond does not appear to greatly restrict fish access. Some deepening and enlargement of the pond may be possible. The addition of a few large root wads and/or other L.O.D. would seem to have a definite benefit.

GPS: (decimal degrees, Datum WGS84): 11/22/02
fishway - N47.93060, W124.41824

DATE: 8/2/89

OBSERVER: Young

So far this has been a rather cool and damp summer. The pond in channel B-235R-01 (i.e. Bordie's Pond) still contains a considerable amount of water but appears to be quite shallow. Flow at the outlet of the pond was estimated at between 0.25 and 0.5 cfs. Water temp at the pond's outlet was 12 C.

The volume of water coming from B-235R-01 and B-235R-02 (see Dahlgren Springs) appear to be nearly equal at the confluence of the two channels. The flow in B-235R-01 appears to vary much more throughout the year than does the flow in B-235R-02.

The water temp at the mouth of B-235R-01 was 11.5 C while the water temp of Mill Creek (just upstream of B-235R-01) was 13 C. Above the confluence of B-235R-01 and B-235R-02, the water temp of B-235R-01 was 12.5 C. B-235R-02 was 11 C at its mouth. Flows at the confluence of B-235R-01 and Mill Creek appear to be nearly equal.

DATE: 8/28/89

Water temp. = 51° at pond outlet.

DATE: 11/15/89

OBSERVER: Young, Nettin

The water temp of B-235R-01 (just above the mouth of B-235R-02) was 49 F. Water temp of B-235R-02 (at its mouth) was 49.5 F.

DATE: 2/22/90

Installed smolt trap to monitor spring outmigration of juvenile coho (see trapping data for results).

DATE: 1995

OBSERVER: Nettin

A fishway was installed in the outlet of Bordies Pond by Clallam County Task Force.

DATE: 4/97

OBSERVER: Darrow

There is still a strong flow through the fishway which may impede juvenile passage up into the pond. Modification of fishway design may need to be done (a spillway over dam boards).

DATE: 12/9/97

OBSERVER: King, T. Burns

T. Burns checked fishway for excessive flow. Fishway was clear of obstructions.

DATE: 10/29/98

OBSERVER: Darrow

System is functioning well at present flow. Pond is pumped up but flow is ideal for fishway.. Spring water in ditchline has been modified to enter below fishway. Salmonids observed in pond and ditchline.

DATE: 4/19/99

OBSERVER: Darrow

Strong flow through fishway. Pond has a significant amount of vegetative cover. Observed fry and presmolts in dtchline flow along trail - downstream of the fishway.

DATE: 10/16/99

OBSERVER: Darrow

Salmon Coalition installed an overflow flume on the right side of the fishway to help alleviate the velocity problem during high flows. Salmonids were observed in the ditchline.

DATE: 4/17/00

OBSERVER: Darrow

System looked good. About a third of the flow was going over the spillway. Caretakers of the site have cleared some of the prolific aquatic moss from the pond (piled up along the banks). There is still ample vegetative cover. Fish were seen rising sporadically in the pond.

DATE: 10/31/00

OBSERVER: Darrow

Salmon Coalition had placed carcasses throughout pond. They tethered the fish in attempt to slow predation by otters. Flow was good. Observed numerous rises on the surface and juvenile coho in the trail side waterway.

DATE: 3/12/01

OBSERVER: Darrow

Just the right amount of flow coming through fishway with the excess flowing over the spillway. Observed a pile of excess salmon eggs at the foot of the fishway. There were a few rises on the pond.

DATE: 10/17/01

OBSERVER: Darrow

Everything looked. Fishway appeared to have an optimum flow through it. There some surface activity on the pond. Prolific aquatic moss that was growing in the pond appears to have been removed.

DATE: 12/4/01

OBSERVER: Darrow

The Pacific Coast Salmon Coalition distributed about 2 totes of salmon carcasses throughout this site for nutrient enhancement.

DATE: 4/27/02

OBSERVER: Darrow

Volume of flow through the fishway appears to be excessive. The spillway has a minor amount of water flowing over it. Observed some fry in pools along the foot trail and rises on the pond.

DATE: 11/22/02

OBSERVER: Powell

Lots of flow through the fishway.

GPS: (decimal degrees, Datum WGS84):

fishway - N47.93060, W124.41824

DATE: 5/21/03

OBSERVER: Powell

Fishway is clear and all else looks okay.

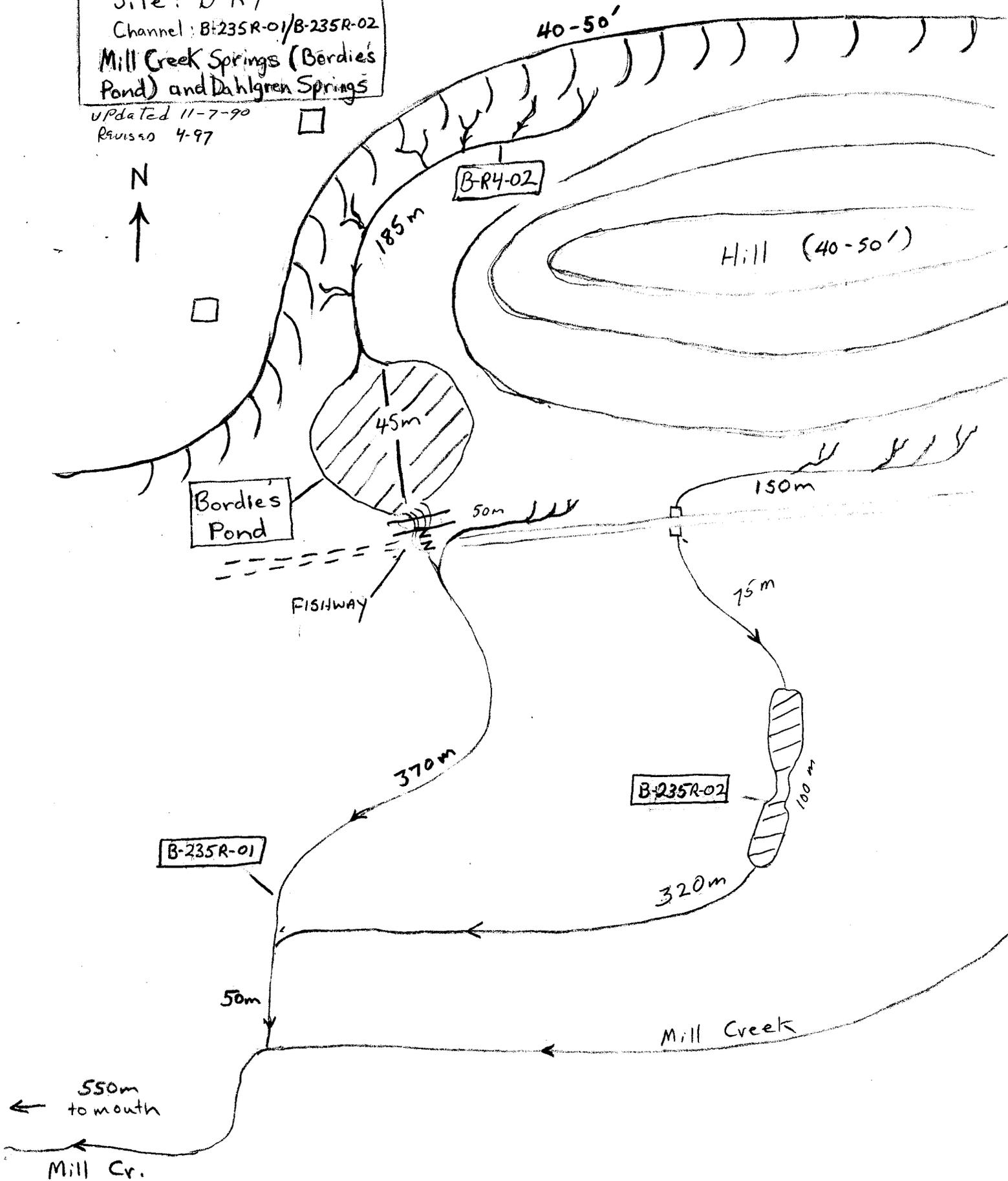
DATE: 11/6/03

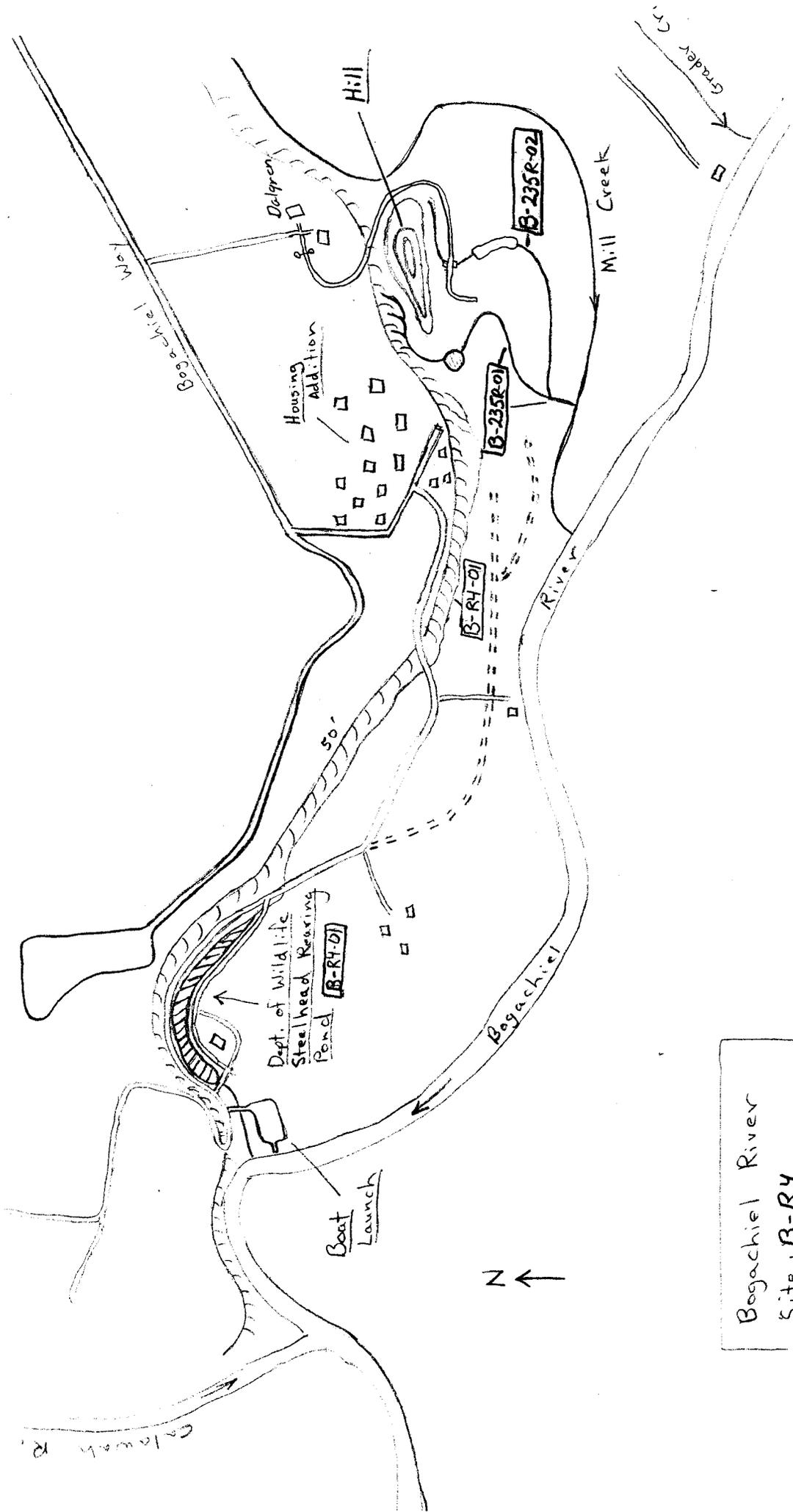
OBSERVER: Nettnin

Project looks good.

Bogachiel R.
Site: B-R4
Channel: B-235R-01/B-235R-02
Mill Creek Springs (Bordie's
Pond) and Dahlgren Springs

Updated 11-7-90
Revised 4-97





Bogachiel River
 Site: B-R4
 Overview Map
 Revised 4/97

Bogachiel River

site: B-R4

Site map

Direction map

