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Ex. 279-US-420

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Stream: Sycan River
Tributary to: Sprague River>Williamson River
Reach: 1 Hyde
Survey Type: ODFW Stream Habitat
Access: Foot
Start: T36S-R12E-S10NE
Quad: Beatty
Date: 18 August 04
Surveyors: R. Nawa K. Hartzell
Report: R. Nawa, C. Huntington
Distance Surveyed: 3.8 km

Land Use

Land use is light grazing and hay production.

Valley and Stream Channel Geometry

The river was in a broad valley over 2 km wide. Extremely low stream gradient (0.03%) was accompanied by high sinuosity (2.0). High terraces sloped abruptly to constrain narrow floodplains adjacent to the 16 m wide river. Riffles were 10 percent bedrock which may indicate a trend towards downcutting.

Substrate

The streambed was very fine textured. An estimated 84 percent of the streambed was sand/organics, 13 percent gravel, and 3 percent bedrock.

Spawning Gravel

Riffles were fine textured gravel (62%) and sand (28%). Approximately 190 m² of spawning gravel was suitable for spawning steelhead (52 m²/km). Most of this gravel was in a riffle unit 34 at the uppermost end of the reach (Map; Photo 100). The median size (D50) of gravel at riffle unit 26 was 4mm-8mm (Wolman Pebble Count). About 250 m² of marginal spawning gravel at riffle unit 26 was judged to be too small for spawning salmon and steelhead. Units 23 and 31 had a total of 300 m² of marginal gravel which was also judged to be too fine for spawning (90% < 21mm). We observed numerous recent redds in the fine textured gravel in the lower portions of the reach. The redds were probably made by lamprey (Photo 93).

Riparian Vegetation

Grass dominates the riparian zone with occasional willows (Photo 100). Existing grass and shrub cover is inadequate to stabilize streambanks. About 16 percent of streambanks were actively eroding. Shade from high terraces averaged only 5 percent.

Wood

No wood was found in the channel because there are no trees on the streambanks.

Rearing and Adult holding Habitat

Extremely low stream gradient caused the stream to be mostly pools (47%) and glides (47%). Pool depths ranged from 0.7m-1.8m. Glides averaged 0.4 m deep. Residual pool depths averaged 0.73 m. About four percent of the streambanks were undercut.

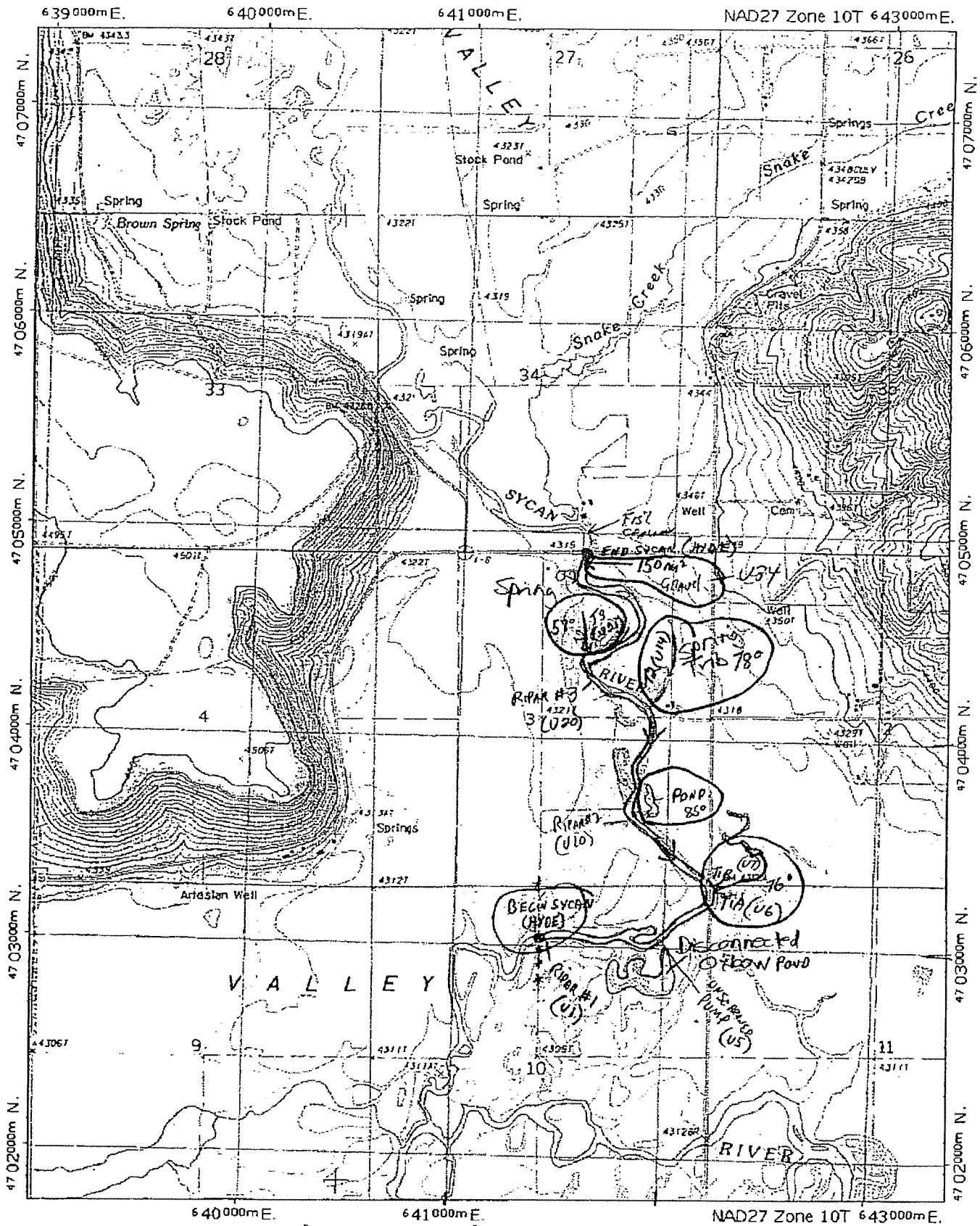
Stream Temperature/Spring Fed Tributaries

Maximum spot stream temperature in was 24.4°C at 1600 pdt. Warm 24.4°C water flowed into the mainstem from springs and ponds located east of Godowa Springs Road (T1A,B; Map). Culverts below the road prevent fish access to this tributary. A spring fed tributary (T2) at unit 14 was 25.5°C (Map). A spring fed tributary (T3) at unit 21 was 13.9°C (Map). An off-channel pond near unit 10 was 29.5 °C (Map).

Photo93 Unit 1
Unidentified redds in
fine textured gravel
judged too small for
salmon and steelhead
spawning

Photo 100 Unit34
Riffle in center of
photo had 150 m² of
suitable spawning
gravel. Redband trout
are known to spawn
in this area.

Hyde

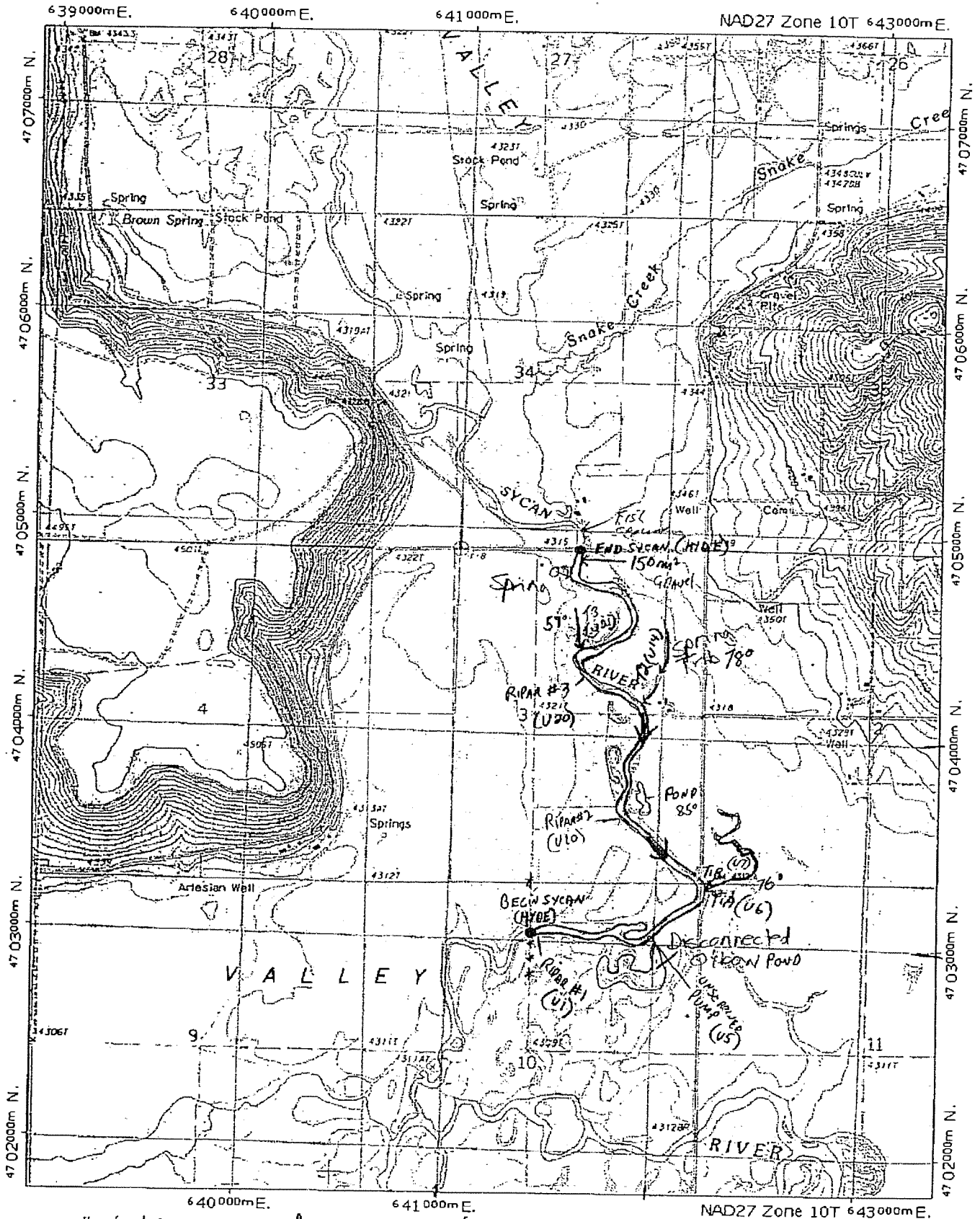


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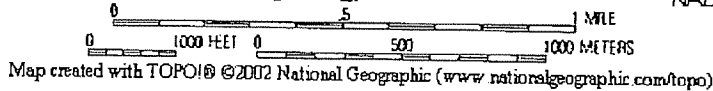
Map created with TOPO!® ©2002 National Geographic (www.nationalgeographic.com/topo)

24 AUG 04
 R. NAWA
 Sycan R.

Hyde



4 = fence line



24 Aug 04

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