

STREAM INVENTORY REPORT

SCOTT RIVER

2023/2024



SISKIYOU RESOURCE CONSERVATION DISTRICT

Report prepared by
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STREAM INVENTORY REPORT

Scott River

INTRODUCTION

A stream inventory was conducted between 9/27/23 and 8/16/24 on Scott River. The survey began at the confluence with French Creek and extended downstream approximately 3.8 miles.

The objective of the habitat inventory was to document the habitat available to anadromous salmonids in Scott River. Additionally, a biological inventory was conducted to document the presence and distribution of juvenile salmonid species.

The objective of this report is to document the current habitat conditions and recommend options for the potential enhancement of habitat for chinook salmon, coho salmon, and steelhead trout. Recommendations for habitat improvement activities are based upon target habitat values suitable for salmonids in California's north coast streams.

WATERSHED OVERVIEW

Scott River is a tributary to Klamath River, a tributary to the Pacific Ocean, located in Siskiyou County, California. Scott River's legal description at the confluence with Klamath River is T45N R10W S06. Its location is 41:46:45.0N north latitude and 123:02:08.0W west longitude, LLID number 1230355417791. Scott River is a third order stream and has approximately 58 miles of blue line stream. Scott River drains a watershed of approximately 814 square miles. Elevations range from about 1600 feet at the mouth of the creek to 8500 feet in the headwater areas. Mixed conifer forest and farmland dominates the watershed. Land usage within the survey area is primarily privately owned agricultural land used for alfalfa production and cattle grazing. Vehicle access exists via CA HWY 3. The areas of Scott River documented in this report can be found on the USGS McConaughy Gulch 7.5 minute quadrangle.

METHODS

The habitat inventory conducted in Scott River follows the methodology presented in the *California Salmonid Stream Habitat Restoration Manual* (Flosi et al, 1998). The California Conservation Corps (CCC) Technical Advisors and Watershed Stewards Project/AmeriCorps (WSP) Members that conducted the inventory were trained in standardized habitat inventory methods by the California Department of Fish and Game (DFG). This inventory was conducted by two-person teams.

SAMPLING STRATEGY

This inventory sampled approximately 100% of the habitat units within the survey area. All habitat units included in the survey were classified according to habitat type and their lengths were measured. All pool units were measured for maximum depth, depth of pool tail crest

(measured in the thalweg), dominant substrate composing the pool tail crest, and embeddedness.

HABITAT INVENTORY COMPONENTS

A standardized habitat inventory form has been developed for use in California stream surveys and can be found in the *California Salmonid Stream Habitat Restoration Manual*. This form was used in Scott River to record measurements and observations. There are eleven components to the inventory form.

1. Flow:

Flow is measured in cubic feet per second (cfs) at multiple sites along the stream survey reach using a Son-Tek flow tracker.

2. Channel Type:

Channel typing is conducted according to the classification system developed and revised by David Rosgen (1994). This methodology is described in the *California Salmonid Stream Habitat Restoration Manual*. Channel typing is conducted simultaneously with habitat typing and follows a standard form to record measurements and observations. There are five measured parameters used to determine channel type: 1) water slope gradient, 2) entrenchment, 3) width/depth ratio, 4) substrate composition, and 5) sinuosity. Channel characteristics are measured using a clinometer, hand level, hip chain, tape measure, and a stadia rod.

3. Temperatures:

Both water and air temperatures are measured and recorded at every tenth habitat unit. The time of the measurement is also recorded. Both temperatures are taken in degrees Fahrenheit at the middle of the habitat unit and within one foot of the water surface.

4. Habitat Type:

Habitat typing uses the 24 habitat classification types defined by McCain and others (1990). Habitat units are numbered sequentially and assigned a type identification number selected from a standard list of 24 habitat types. Dewatered units are labeled "dry". Scott River habitat typing used standard basin level measurement criteria. These parameters require that the minimum length of a described habitat unit must be equal to or greater than the stream's mean wetted width. All measurements are in feet to the nearest tenth. Habitat characteristics are measured using a clinometer, tape measure, and stadia rod.

5. Embeddedness:

The depth of embeddedness of the cobbles in pool tail-out areas is measured by the percent of the cobble that is surrounded or buried by fine sediment. In Scott River, embeddedness was ocularly estimated. The values were recorded using the following ranges: 0-25% (value 1), 26-50% (value 2), 51-75% (value 3) and 76-100% (value 4). Additionally, a value of 5 was assigned to tail-outs deemed unsuited for spawning due to inappropriate substrate like bedrock,

log sills, boulders or other considerations.

6. Shelter Rating:

Instream shelter is composed of those elements within a stream channel that provide juvenile salmonids protection from predation, reduce water velocities so fish can rest and conserve energy, and allow separation of territorial units to reduce density related competition for prey. The shelter rating is calculated for each habitat unit by multiplying shelter value and percent cover. Using an overhead view, a quantitative estimate of the percentage of the habitat unit covered is made. All cover is then classified according to a list of nine cover types. In Scott River, a standard qualitative shelter value of 0 (none), 1 (low), 2 (medium), or 3 (high) was assigned according to the complexity of the cover. Thus, shelter ratings can range from 0-3 and are expressed as mean values by habitat types within a stream.

7. Substrate Composition:

Substrate composition ranges from silt/clay sized particles to boulders and bedrock elements. Dominant and sub-dominant substrate elements were ocularly estimated using a list of seven size classes and recorded as a one and two, respectively. In addition, the dominant substrate composing the pool tail-outs is recorded for each pool.

8. Canopy:

Stream canopy density was estimated using modified handheld spherical densimeters as described in the *California Salmonid Stream Habitat Restoration Manual*. Canopy density relates to the amount of stream shaded from the sun. In addition, the area of canopy was estimated ocularly into percentages of coniferous or hardwood trees.

9. Bank Composition and Vegetation:

Bank composition elements range from bedrock to bare soil. However, the stream banks are usually covered with grass, brush, or trees. These factors influence the ability of stream banks to withstand winter flows. In Scott River, the dominant composition type and the dominant vegetation type of both the right and left banks for each unit were selected from the habitat inventory form. Additionally, the percent of each bank covered by vegetation (including downed trees, logs, and rootwads) was estimated and recorded.

10. Large Woody Debris Count:

Large woody debris (LWD) is an important component of fish habitat and an element in channel forming processes. In each habitat unit all pieces of LWD partially or entirely below the elevation of bankfull discharge are counted and recorded. The minimum size to be considered is twelve inches in diameter and six feet in length. The LWD count is presented by reach and is expressed as an average per 100 feet.

BIOLOGICAL INVENTORY

Biological sampling during the stream inventory is used to determine fish species and their distribution in the stream. Fish presence was observed both in-stream and from the stream banks in Scott River.

DATA ANALYSIS

Data from the habitat inventory form are entered into Stream Habitat 2.0.18, a Visual Basic data entry program developed by Karen Wilson, Pacific States Marine Fisheries Commission in conjunction with the California Department of Fish and Game. This program processes and summarizes the data, and produces the following ten tables:

- Riffle, Flatwater, and Pool Habitat Types
- Habitat Types and Measured Parameters
- Pool Types
- Maximum Residual Pool Depths by Habitat Types
- Mean Percent Cover by Habitat Type
- Dominant Substrates by Habitat Type
- Mean Percent Vegetative Cover for Entire Stream
- Fish Habitat Inventory Data Summary by Stream Reach (Table 8)
- Mean Percent Dominant Substrate / Dominant Vegetation Type for Entire Stream
- Mean Percent Shelter Cover Types for Entire Stream

Graphics are produced from the tables using Microsoft Excel. Graphics developed for Scott River include:

- Riffle, Flatwater, Pool Habitat Types by Percent Occurrence
- Riffle, Flatwater, Pool Habitat Types by Total Length
- Total Habitat Types by Percent Occurrence
- Pool Types by Percent Occurrence
- Maximum Residual Depth in Pools
- Percent Embeddedness
- Mean Percent Cover Types in Pools
- Substrate Composition in Pool Tail-outs
- Mean Percent Canopy
- Dominant Bank Composition by Composition Type
- Dominant Bank Vegetation by Vegetation Type

HABITAT INVENTORY RESULTS

* ALL TABLES AND GRAPHS ARE LOCATED AT THE END OF THE REPORT *

The habitat inventory of 9/27/2023 to 8/16/2024, was conducted by Siskiyou RCD field technicians TD, JO, and CG. The total length of the stream surveyed was approximately 19,909 feet with an additional 2,824 feet of side channel.

Stream flow measurements were conducted throughout the survey periods, which were conducted during base flow conditions during 2 separate water years. Stream flow was estimated to be between 13.5 and 25 cfs during the survey periods.

Scott River was found to be a C4 channel type in the reaches surveyed.

C type channels are meandering point-bar riffle/pool alluvial channels with broad well-defined floodplain on low gradients. C4 denotes gravel dominant substrate.

Water temperatures taken during the survey period ranged from 48 to 64 degrees Fahrenheit. Air temperatures ranged from 52 to 92 degrees Fahrenheit.

Table 1 summarizes the Level II riffle, flatwater, and pool habitat types. Based on frequency of occurrence there were 36% pool units, 32% riffle units, 32% flatwater units, (Graph 1). Based on total length of Level II habitat types there were 27% pool units, 25% riffle units, and 49% flatwater units (Graph 2).

A total of 55 pools were identified (Table 3). Scour pools were the most frequently encountered, at 55%, and comprised 60% of the total length of all pools (Graph 4).

Table 4 is a summary of maximum residual pool depths by pool habitat types. Pool quality for salmonids increases with depth. 24 of the 55 pools (44%) had a residual depth of three feet or greater (Graph 5).

The depth of cobble embeddedness was estimated at pool tail-outs. Of the 57 pool tail-outs measured, 16 had a value of 1 (28.1%); 33 had a value of 2 (57.9%); 2 had a value of 3 (3.5%); 4 had a value of 4 (7%); 2 had a value of 5 (3.5%); (Graph 6). On this scale, a value of 1 indicates the best spawning conditions and a value of 4 the worst. Additionally, a value of 5 was assigned to tail-outs deemed unsuited for spawning due to inappropriate substrate such as bedrock, log sills, boulders, or other considerations.

A shelter rating was calculated for each habitat unit and expressed as a mean value for each habitat type within the survey using a scale of 0-300. Riffle habitat types had a mean shelter rating of 47, flatwater habitat types had a mean shelter rating of 56, and pool habitats had a mean shelter rating of 42 (Table 1). Of the pool types, the Main Channel pools had a mean shelter rating of 33, Backwater pools had a mean shelter rating of 86, Scour pools had a mean shelter rating of 36 (Table 3).

Table 5 summarizes mean percent cover by habitat type. Terrestrial Vegetation was the dominant cover type found along this stretch of Scott River. Graph 7 describes the pool cover specifically, which was primarily provided by terrestrial vegetation followed by small woody debris.

Table 6 summarizes the dominant substrate by habitat type. Graph 8 depicts the dominant substrate observed in pool tail-outs, which was found to be small cobble at 52%, followed by gravel at 33%.

The mean percent canopy density for the surveyed length of Scott River was 27%, of which 100% was provided by hardwood or non-coniferous trees. This means that 73 percent of the canopy was open. Graph 9 describes the mean percent canopy in Scott River.

For the stream reach surveyed, the mean percent right bank vegetated was 74%. The mean percent left bank vegetated was 80%. The dominant elements composing the structure of the stream banks consisted of 14% boulder, 38% cobble/gravel, and 47% sand/silt/clay (Graph 10). Grass was the dominant vegetation type observed in 38% of the units surveyed. Additionally, 33% of the units surveyed had brush as the dominant vegetation type, and 29% had deciduous trees as the dominant vegetation (Graph 11).

BIOLOGICAL INVENTORY RESULTS

In reach 15, from the French Creek confluence to Young's Dam, which comprised the first 9109 feet of stream, 3 surveys were done covering approximately 1350 feet of channel. The sites yielded 192 young-of-the-year steelhead/rainbow trout (SH/RT), 6 age 1+ SH/RT, 65 coho, and 236 chinook. These surveys took place 7/24, 7/25, and 8/28 of 2024.

In reach 14, which comprised the next 10800 feet of stream from Young's Dam to the Horn Lane Bridge, approximately 7600 feet were sampled between 7/24/24 and 8/27/24. These surveys found 5328 young-of-the-year steelhead/rainbow trout (SH/RT), 82 age 1+ SH/RT, 63 age 2+ SH/RT, 375 coho, and 686 chinook.

The following chart displays the information yielded from these sites:

Juvenile Fish Survey Daily Totals - Scott River 2024								
	0+coho	1+coho	0+chinook	1+chinook	0+ trout	1+trout	2+trout	Site Surveyed
7/24/24	43		23		490			Below Young's Dam RCH 14
7/24/24			3		152			Site SB4412 RCH 15
7/25/24	60		28		40	5		Below French Creek Confluence RCH 15
7/29/24			1		66	1		Habitat Units 0065-0071 RCH 14
7/30/24			66			10	50	Habitat Units 0072-0080 RCH 14
8/6/24	20		120		331	40		Habitat Units 0081-0086.1 RCH 14
8/7/24					600	26	8	Habitat Units 0087-0090 RCH 14
8/8/24	10			10	300			Habitat Units 0091-93 RCH 14
8/9/24	200		430		350			Habitat Units 0094-0102 RCH 14
8/13/24	62		36		790		2	Habitat Units 0100-0107 RCH 14
8/15/24					300			Habitat Units 0107.1-0113 RCH 14
8/16/24	40				170			Habitat Units 0114-0121 RCH 14
8/27/24					1931	5	3	Below Young's Dam RCH 14
8/28/24	5		205			1		Young's Dam to Site SB4412 RCH 15

DISCUSSION

Scott River is C4 channel type for the entire 22,733 feet of stream surveyed. C channel types are low gradient, meandering, point-bar, riffle/pool, alluvial channels with broad, well-defined floodplains. The C4 type channel is gravel dominated. The suitability of C4 channel types for fish habitat improvement structures is as follows:

- C4 Channels are typically good for bank placed boulders.
- Fair for plunge weirs; single and opposing wing-deflectors; channel constrictors; and log cover.

The water temperatures recorded on the survey days 9/27/2023 to 8/16/2024, ranged from 48 to 64 degrees Fahrenheit. Air temperatures ranged from 52 to 92 degrees Fahrenheit. To make any further conclusions further monitoring and more extensive biological sampling would need to be conducted.

Flatwater habitat types comprised 49% of the total length of this survey, riffles 25%, and pools 27%. The pools are relatively deep, with 38 of the 55 (69%) pools having a maximum residual depth greater than 2 feet, and 24 of the 55 (44%) having a maximum depth greater than 3 feet. In general, pool enhancement projects are considered when primary pools comprise less than 40% of the length of total stream habitat. Installing structures that will increase or deepen pool habitat is recommended for locations where their installation will not be threatened by high stream energy.

49 of the 60 pool tail-outs measured had embeddedness ratings of 1 or 2. 6 of the pool tail-outs had embeddedness ratings of 3 or 4. 2 of the pool tail-outs had a rating of 5, which is considered unsuitable for spawning. Cobble embeddedness measured to be 25% or less, a rating of 1, is considered to indicate good quality spawning substrate for salmon and steelhead. Sediment sources in Scott River should be mapped and rated according to their potential sediment yields, and control measures should be taken.

51 of the 60 pool tail-outs measured had gravel or small cobble as the dominant substrate. This is generally considered good for spawning salmonids.

The mean shelter rating for pools was 42. The shelter rating in the flatwater habitats was 56. A pool shelter rating of approximately 100 is desirable. The amount of cover that now exists is being provided primarily by terrestrial vegetation followed by small woody debris. Log and root wad cover structures in the pool and flatwater habitats would enhance both summer and winter salmonid habitat. Log cover structures can provide rearing fry with protection from predation, rest from water velocity, and divide territorial units to reduce density related competition.

The mean percent canopy density for the stream was 27%. Reach 15 had a canopy density of 41.16667%, Reach 14 had a canopy density of 18.5102%. In general, revegetation projects are considered when canopy density is less than 80%.

The percentage of right and left bank covered with vegetation is relatively high at 74% and 80%, respectively, and is primarily provided by grass and willows. In areas of stream bank erosion or where bank vegetation is sparse, planting endemic species of coniferous and hardwood trees, in

conjunction with bank stabilization, is recommended.

RECOMMENDATIONS

- 1) Scott River should be managed as an anadromous, natural production stream.
- 2) The limited water temperature data suggest that maximum temperatures are within the acceptable range for juvenile salmonids. To establish more complete and meaningful temperature regime information, 24-hour monitoring during the July and August temperature extreme period should be performed for 3 to 5 years.
- 3) Where feasible, design and engineer pool enhancement structures to increase the number of pools. This must be done where the banks are stable or in conjunction with stream bank armor to prevent erosion.
- 4) Increase woody cover in the pools and flatwater habitat units. Most of the existing cover in the pools is from terrestrial vegetation. Adding high quality complexity with woody cover in the pools is desirable.
- 5) Inventory and map sources of stream bank erosion and prioritize them according to present and potential sediment yield. Identified sites should then be treated to reduce the amount of fine sediment entering the stream.
- 6) Active and potential sediment sources related to the road system need to be identified, mapped, and treated according to their potential for sediment yield to the stream and its tributaries.
- 7) Increase the canopy on Scott River by planting appropriate native vegetation like willow, alder, and cottonwood along the stream where shade canopy is not at acceptable levels. The reaches above this survey section should be inventoried and treated as well, since the water flowing here is affected from upstream. In many cases, planting will need to be coordinated to follow bank stabilization or upslope erosion control projects.

COMMENTS AND LANDMARKS

Differences were observed between Reaches 14 and 15 in the relative abundance of wildlife, with Reach 14 appearing to have higher fish, bird, and beaver activity.

Multiple sites within the survey area were identified where bank erosion may be contributing fine sediment to the channel, with the most severe being in Reach 15 from approximately 41.255597N and 122.503925W to 41.255730N and 122.504135W, approximately 650 meters upstream from Young's Dam (see images below). The addition of such fine sediment to the system may be detrimental to the quality of spawning gravels downstream.

There are two sites in Reach 14 in which past projects placed beaver dam analogs (BDAs) which appear to have been effective in pushing the river channel away from eroding banks. In

particular, at 41.2643N and 122.5117W, multiple large BDA placements were installed which altered the flow of the river away from a severely eroded bank, and which in the process created a wetland/marshy area where many birds and fish were observed. There are multiple sites along Reach 15 that may benefit from the implementation of similar projects to reduce bank erosion and create more suitable rearing habitat for juvenile salmonids.

Bank erosion site in Reach 15:



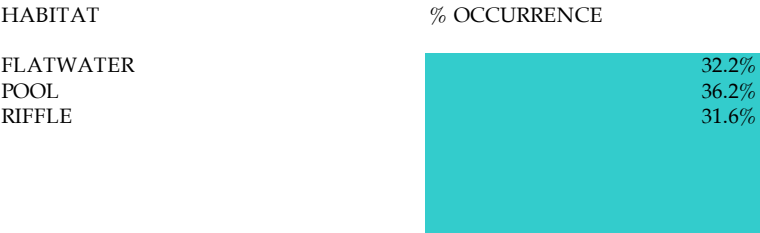
REFERENCES

Flosi, G., Downie, S., Hopelain, J., Bird, M., Coey, R., and Collins, B. 1998. *California Salmonid Stream Habitat Restoration Manual*, 3rd edition. California Department of Fish and Game, Sacramento, California.

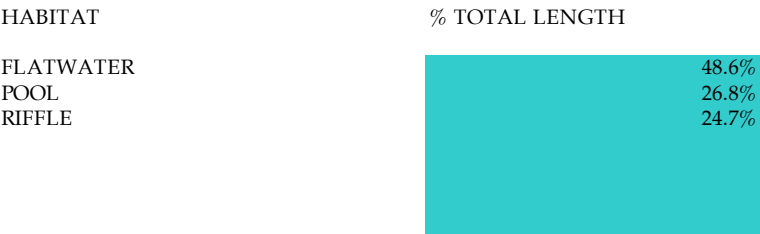
McCain, M., D. Fuller, L. Decker and K. Overton. 1990. Stream habitat classification and inventory procedures for northern California. FHC Currents. No.1. U.S. Department of Agriculture. Forest Service, Pacific Southwest Region.

Rosgen, D.L., 1994. A Classification of Natural Rivers. Catena, Vol 22: 169-199, Elsevier Science, B. V. Amsterdam.

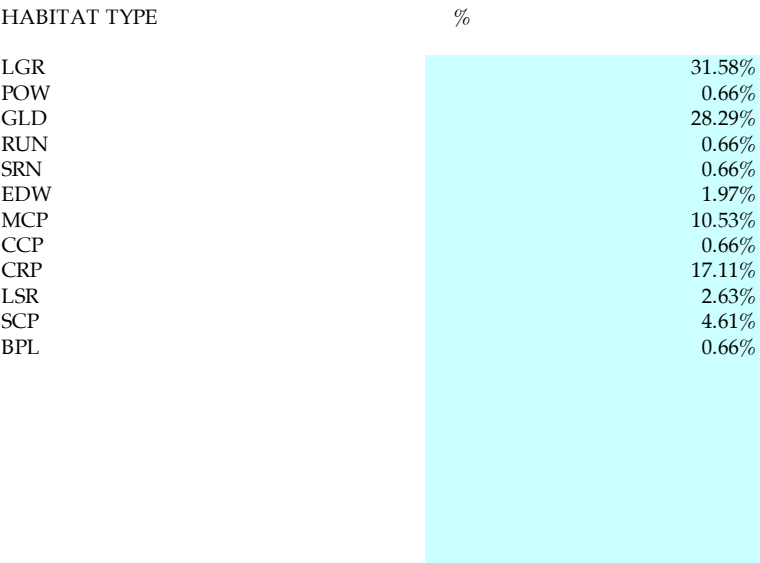
GRAPH 1 - HABITAT TYPES BY PERCENT OCCURRENCE



GRAPH 2 - HABITAT TYPES BY PERCENT TOTAL LENGTH



GRAPH 3 - HABITAT TYPES BY PERCENT OCCURRENCE



GRAPH 4 - POOL HABITAT TYPES BY PERCENT OCCURRENCE



GRAPH 5 - MAXIMUM DEPTH IN POOLS



GRAPH 6 - PERCENT EMBEDDEDNESS

EMBEDDEDNESS	%
VALUE 1	28.1%
VALUE 2	57.9%
VALUE 3	3.5%
VALUE 4	7.0%
VALUE 5	3.5%

GRAPH 7 - MEAN PERCENT COVER TYPES IN POOLS

COVER TYPE	%
UNDERCUT BANKS	5.9%
SMALL WOODY DEBRIS	15.1%
LARGE WOODY DEBRIS	1.6%
ROOT MASS	1.1%
TERRESTRIAL VEG	52.7%
AQUATIC VEG	12.1%
WHITewater	1.5%
BOULDERS	9.7%
BEDROCK LEDGES	0.4%

GRAPH 8 - DOMINANT SUBSTRATE IN POOL TAIL OUTS

SUBSTRATE	% of pools
SILT/CLAY	0
SAND	10
GRAVEL	33.33333333
SMALL COBBLE	51.66666667
LARGE COBBLE	5
BOULDER	0
BEDROCK	0

GRAPH 9 - PERCENT CANOPY

CANOPY	%
CONIFEROUS TREES	0.0%
HARDWOOD TREES	26.6%
OPEN	73.4%

GRAPH 10 - DOMINANT BANK COMPOSITION IN SURVEY REACH

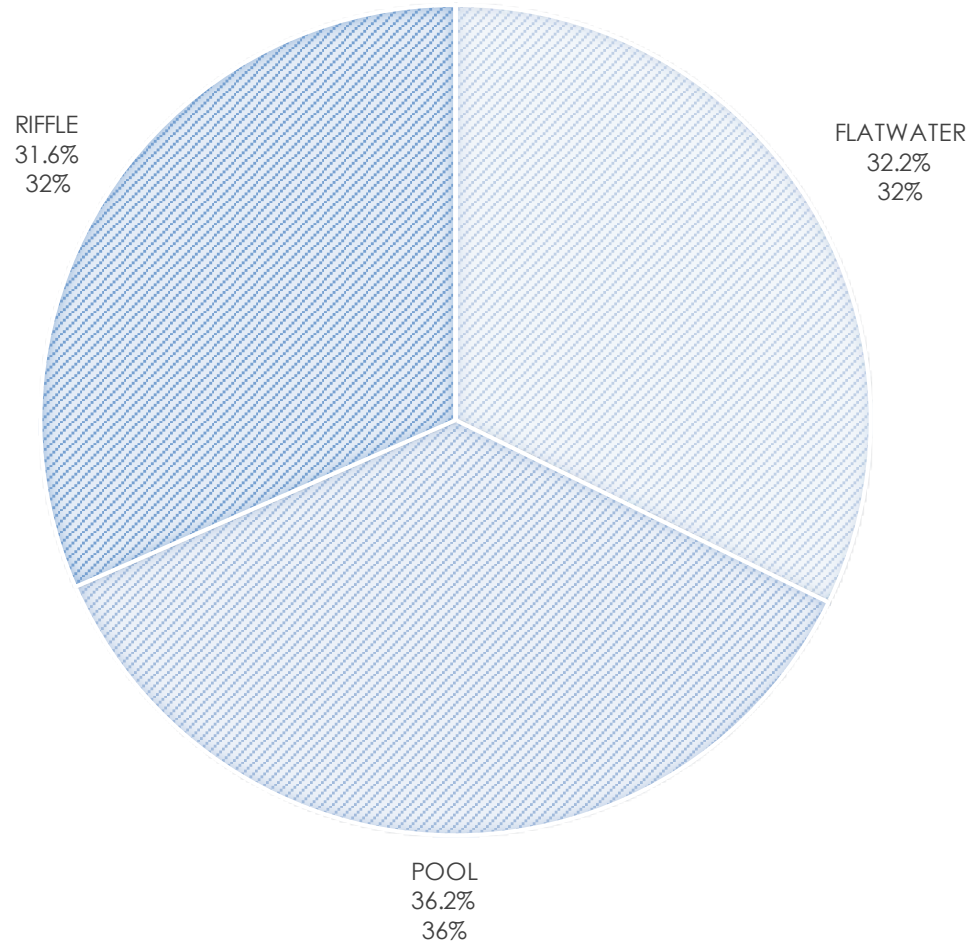
BANK COMPOSITION	%
BOULDER	14.5%
COBBLE/GRAVEL	38.5%
SAND/SILT/CLAY	47.0%

GRAPH 11 - DOMINANT BANK VEGETATION IN SURVEY REACH

BANK VEGETATION	%
GRASS	38.2%
BRUSH	32.9%
HARDWOOD TREES	28.6%
NO VEGETATION	0.3%

SCOTT RIVER 2023 HABITAT TYPES BY PERCENT OCCURRENCE

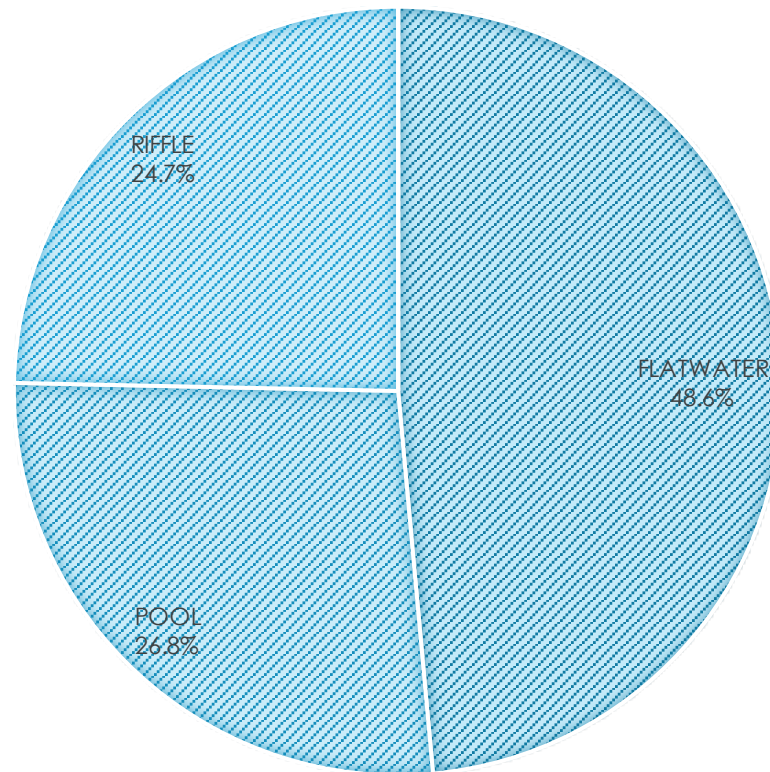
■ FLATWATER ■ POOL ■ RIFFLE ■ ■ ■ ■



GRAPH 1

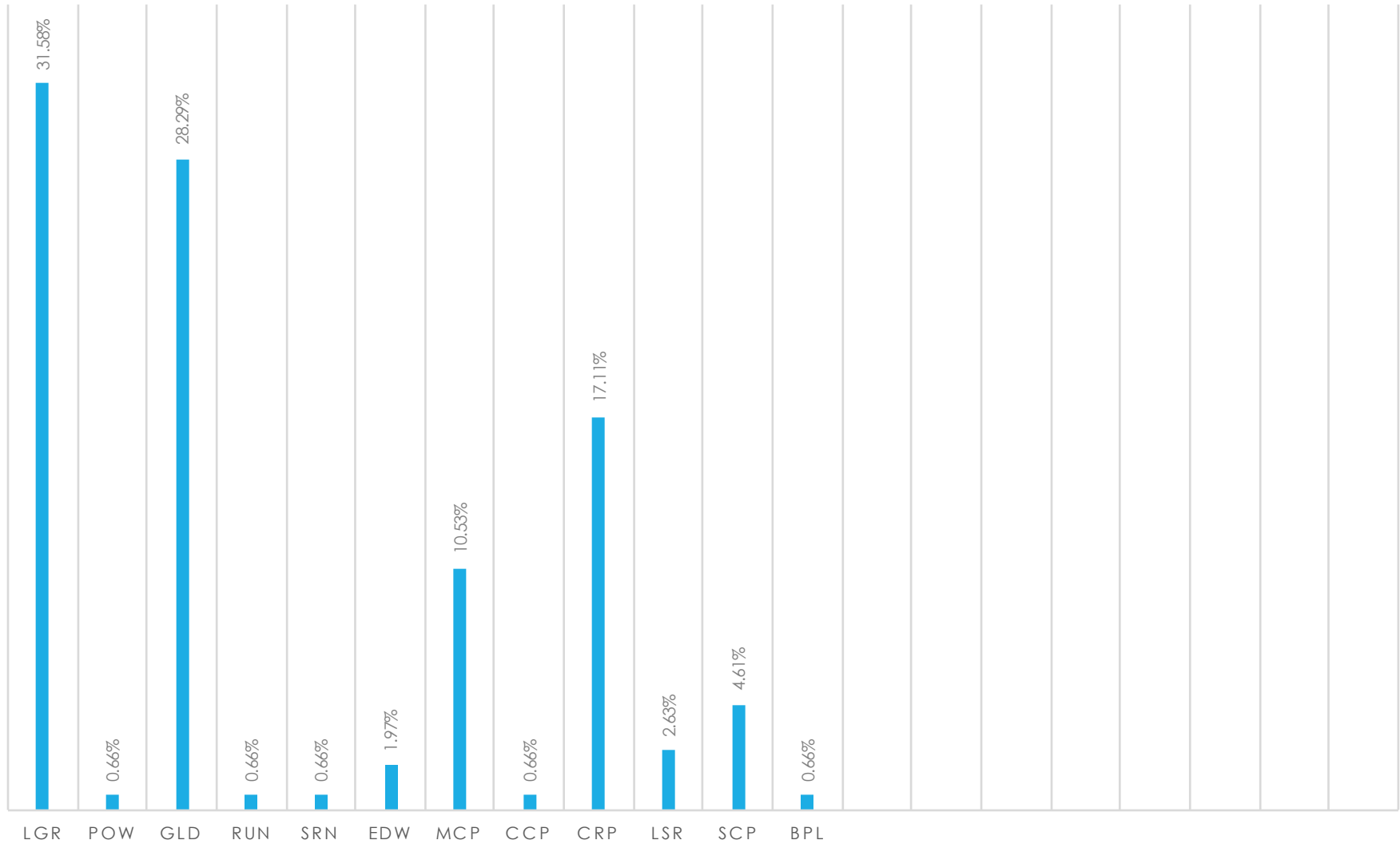
SCOTT RIVER 2023 HABITAT TYPES BY PERCENT TOTAL LENGTH

■ FLATWATER ■ POOL ■ RIFFLE ■ ■ ■ ■



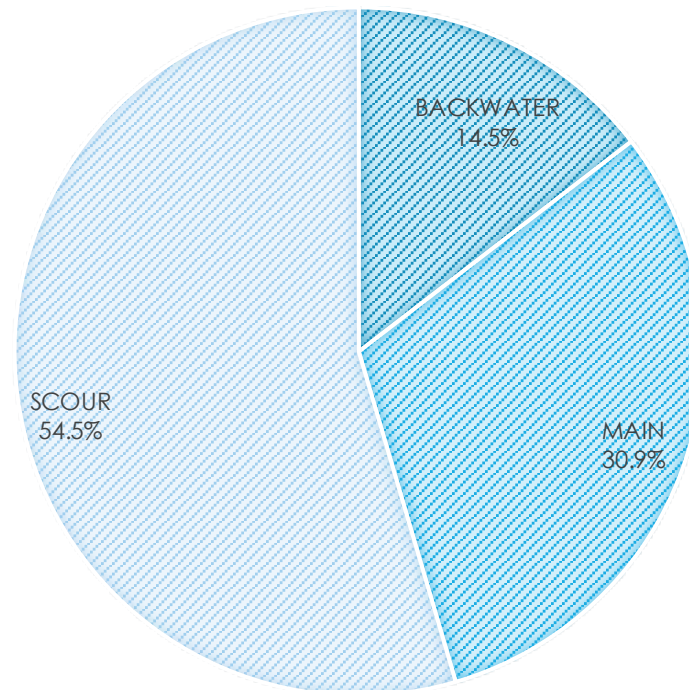
GRAPH 2

SCOTT RIVER 2023
HABITAT TYPES BY PERCENT OCCURRENCE



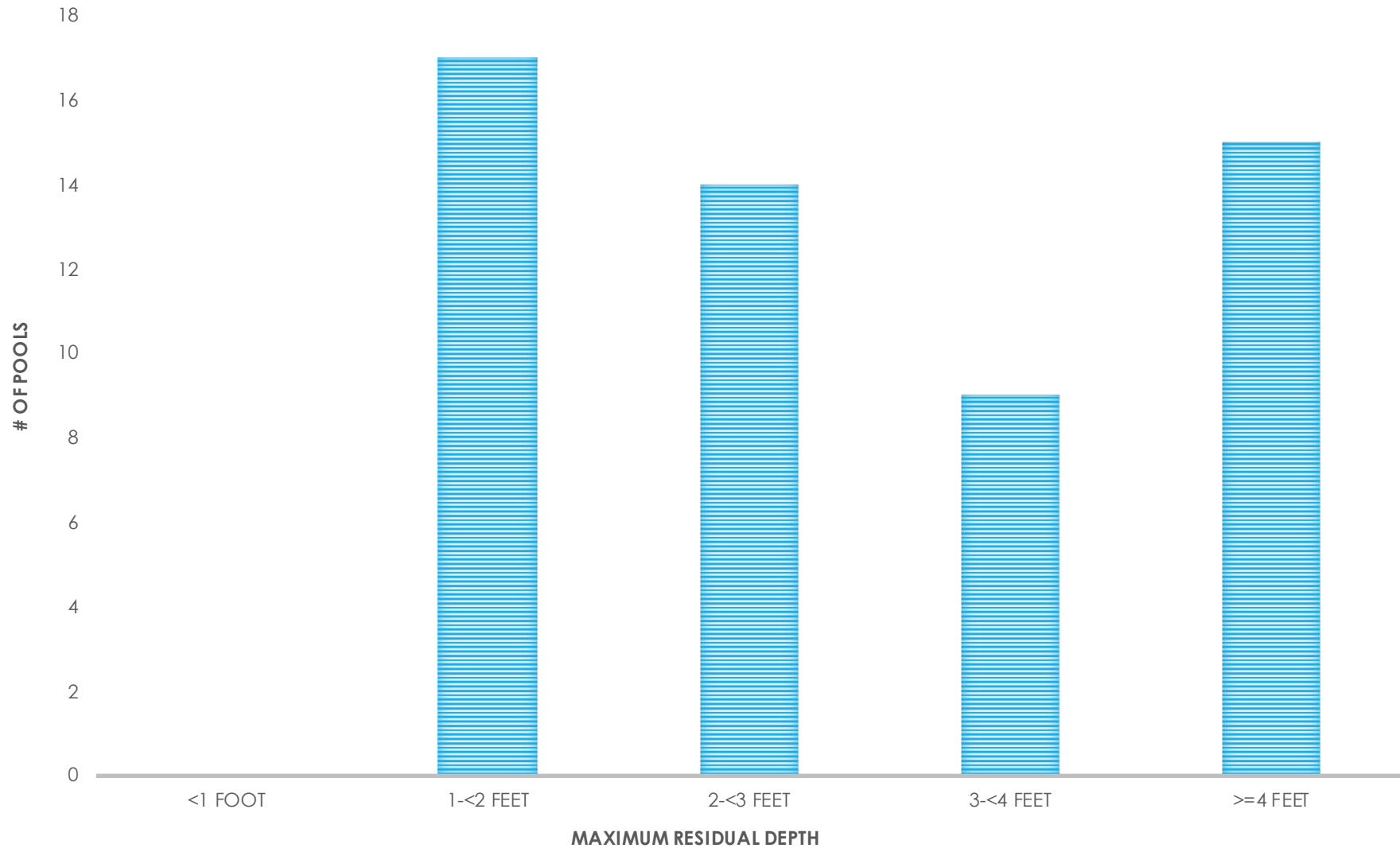
SCOTT RIVER 2023 POOL TYPES BY PERCENT OCCURRENCE

■ BACKWATER ■ MAIN ■ SCOUR



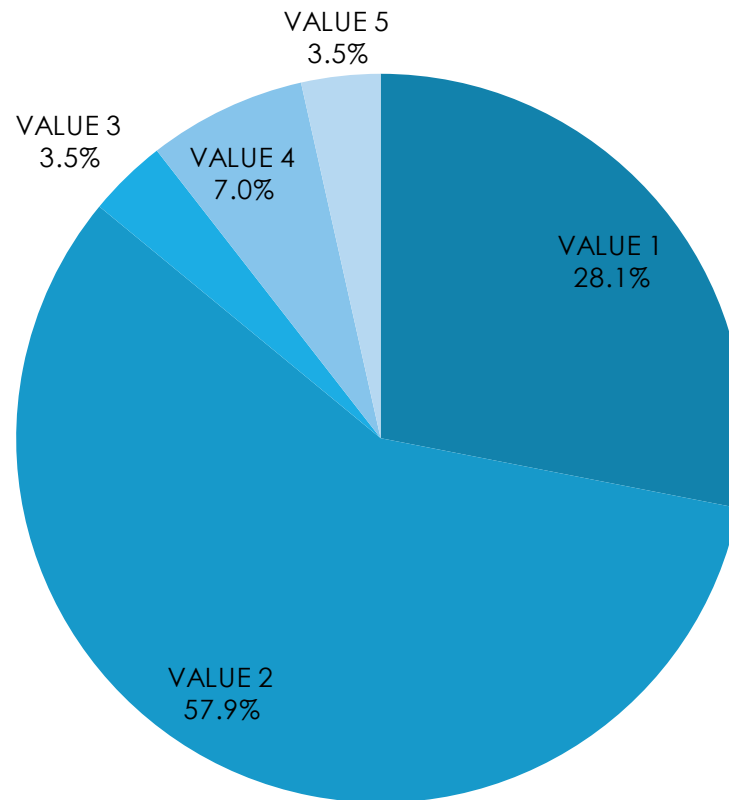
GRAPH 4

SCOTT RIVER 2023 MAXIMUM DEPTH IN POOLS



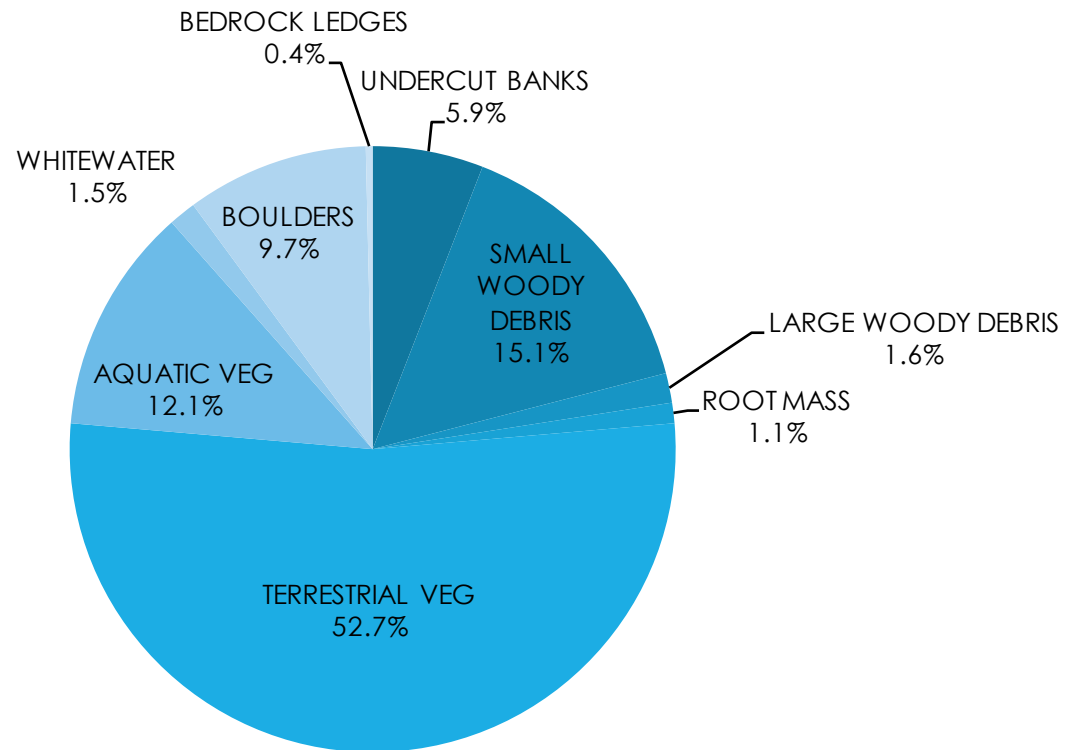
GRAPH 5

SCOTT RIVER 2023 PERCENT EMBEDDEDNESS



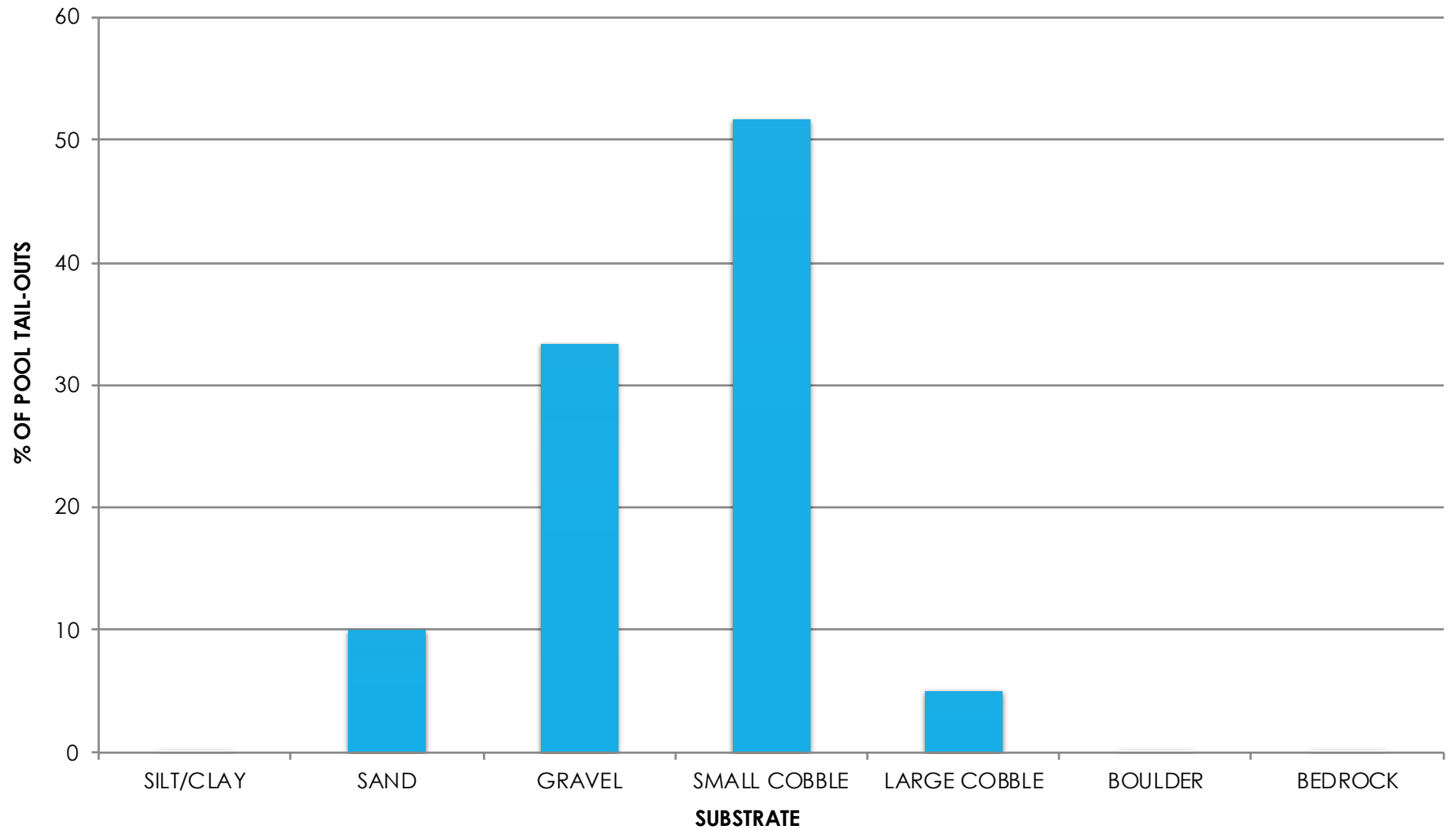
GRAPH 6

SCOTT RIVER 2023 MEAN PERCENT COVER TYPES IN POOLS



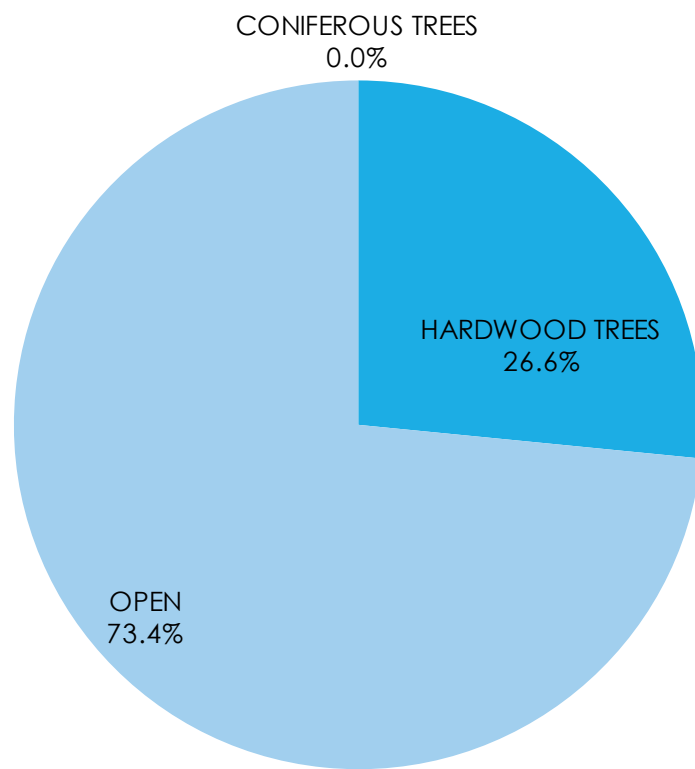
GRAPH 7

SCOTT RIVER 2023 SUBSTRATE COMPOSITION IN POOL TAIL-OUTS



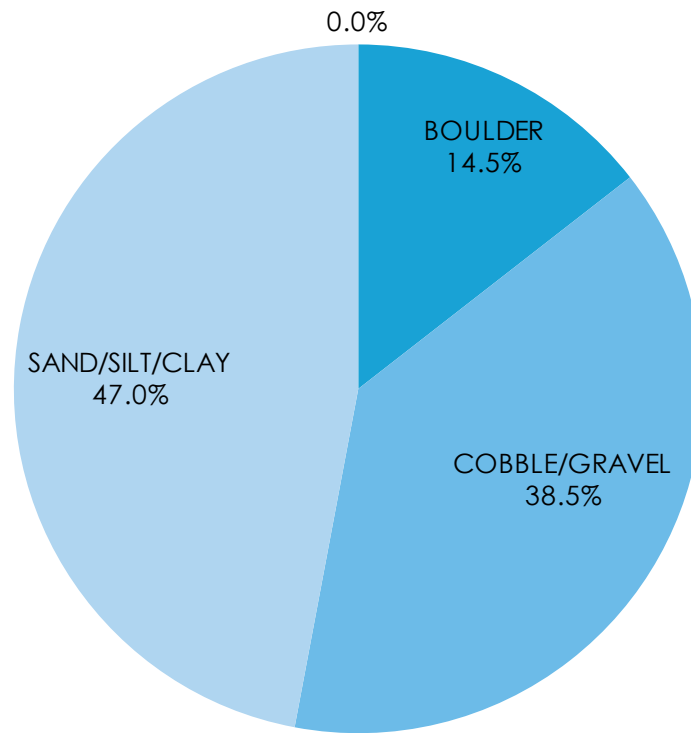
GRAPH 8

SCOTT RIVER 2023 MEAN PERCENT CANOPY



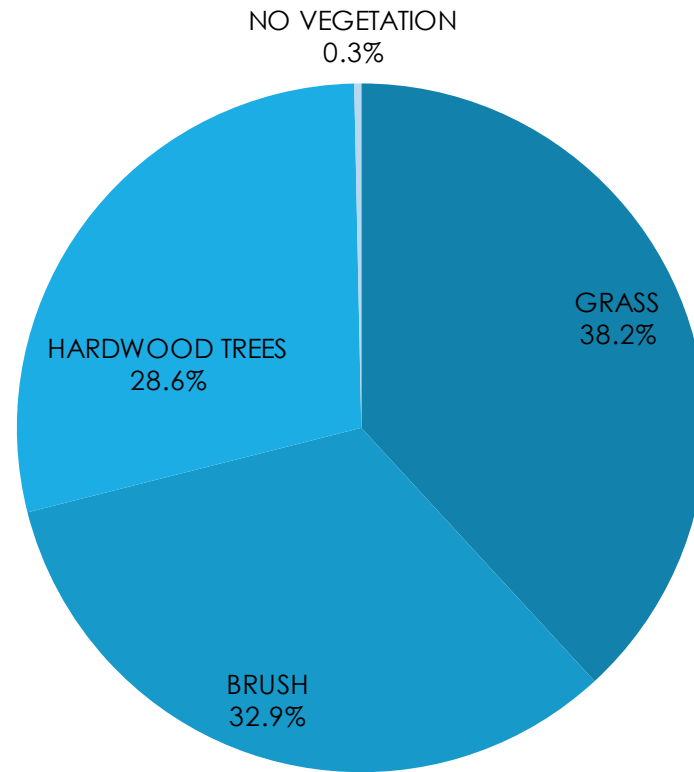
GRAPH 9

SCOTT RIVER 2023 DOMINANT BANK COMPOSITION IN SURVEY REACH



GRAPH 10

SCOTT RIVER 2023 DOMINANT BANK VEGETATION IN SURVEY REACH



GRAPH 11

2023 Scott River - Bird Observations

10/20/23	Marsh wren Golden crowned sparrow Song sparrow European starling Cedar waxwing California quail Bushtit	<i>Cistothorus palustris</i> <i>Zonotrichia atricapilla</i> <i>Melospiza melodia</i> <i>Sturnus vulgaris</i> <i>Bombycilla cedrorum</i> <i>Callipepla californica</i> <i>Psaltiriparus minimus</i>
11/8/23	White-crowned sparrow Golden crowned sparrow	<i>Zonotrichia leucophrys</i> <i>Zonotrichia atricapilla</i>
11/9/23	Black Phoebe	<i>Sayornis nigricans</i>
11/13/23	Dark-eyed junco Hairy woodpecker	<i>Junco hyemalis</i> <i>Dryobates villosus</i>
11/14/23	Golden-crowned sparrow American goldfinch Dark-eyed junco	<i>Zonotrichia atricapilla</i> <i>Spinus tristis</i> <i>Junco hyemalis</i>
11/16/23	Pine siskin American robin Fox sparrow Purple finch Golden-crowned sparrow White crowned sparrow Ruby kinglet Song sparrow Red-winged blackbird	<i>Spinus pinus</i> <i>Turdus migratorius</i> <i>Passerella iliaca</i> <i>Haemorhous purpureus</i> <i>Zonotrichia atricapilla</i> <i>Zonotrichia leucophrys</i> <i>Corthylio calendula</i> <i>Melospiza melodia</i> <i>Agelaius phoeniceus</i>
12/4/23	Song sparrow Mourning Dove Golden-crowned sparrow	<i>Melospiza melodia</i> <i>Zenaida macroura</i> <i>Zonotrichia atricapilla</i>
3/19/24	Western Meadowlark Purple finch	<i>Haemorhous purpureus</i>
3/20/24	House sparrow Lesser Goldfinch Cliff swallow Western meadowlark	<i>Passer domesticus</i> <i>Spinus psaltria</i> <i>Petrochelidon pyrrhonota</i> <i>Sturnella neglecta</i>
3/21/24	Song sparrow Western meadowlark	<i>Melospiza melodia</i> <i>Sturnella neglecta</i>
4/3/24	Red-winged blackbird	<i>Agelaius phoeniceus</i>
4/4/24	White-breasted nuthatch Bushtit Western Meadolark Spotted towhee	<i>Sitta carolinensis</i> <i>Psaltiriparus minimus</i> <i>Sturnella neglecta</i> <i>Pipilo maculatus</i>

2023 Scott River - Bird Observations

4/9/24	House sparrow Bewick's wren Western Meadowlark	<i>Passer domesticus</i> <i>Thryomanes bewickii</i> <i>Sturnella neglecta</i>
4/10/24	House sparrow American goldfinch Golden-crowned sparrow Killdeer Bushtit Song sparrow	<i>Spinus tristis</i> <i>Zonotrichia atricapilla</i> <i>Charadrius vociferus</i> <i>Psaltriparus minimus</i> <i>Melospiza melodia</i>
4/11/24	Red-winged blackbird White crowned sparrow American goldfinch White -throated sparrow	<i>Agelaius phoeniceus</i> <i>Zonotrichia leucophrys</i> <i>Spinus tristis</i> <i>Zonotrichia albicollis</i>
4/16/24	Yellow-rumped warbler Red-winged Blackbird	<i>Setophaga coronata</i> <i>Agelaius phoeniceus</i>
4/18/24	Bewick's wren Bushtit Red-winged Blackbird	<i>Psaltriparus minimus</i> <i>Agelaius phoeniceus</i>
4/24/24	House finch House sparrow American Goldfinch	<i>Haemorhous mexicanus</i> <i>Passer domesticus</i> <i>Spinus tristis</i>
4/30/24	Cliff swallow	<i>Petrochelidon pyrrhonota</i>
5/1/24	Red-winged blackbird Mourning Dove	<i>Agelaius phoeniceus</i> <i>Zenaida macroura</i>
5/5/24	European starling	<i>Sturnus vulgaris</i>
6/4/24	Red-winged blackbird Western Meadowlark House Wren Cliff Swallow	<i>Agelaius phoeniceus</i> <i>Sturnella neglecta</i> <i>Troglodytes aedon</i> <i>Petrochelidon pyrrhonota</i>
6/11/24	Brewer's Blackbird	<i>Euphagus cyanocephalus</i>
6/14/24	House Finch American Robin Killdeer	<i>Haemorhous mexicanus</i> <i>Turdus migratorius</i> <i>Charadrius vociferus</i>
6/25/24	Brewer's blackbird	<i>Euphagus cyanocephalus</i>
6/26/24	Bewick's Wren Spotted Towhee Black-billed Magpie Bullock's oriole	<i>Thryomanes bewickii</i> <i>Pipilo maculatus</i> <i>Pica hudsonia</i> <i>Icterus bullockii</i>
6/27/24	Yellow-breasted chat	

2023 Scott River - Bird Observations

House wren	<i>Troglodytes aedon</i>
Mourning Dove	<i>Zenaida macroura</i>
Spotted Towhee	<i>Pipilo maculatus</i>
Eurasian collared Dove	<i>Streptopelia decaocto</i>
Black-headed Grosbeak	<i>Streptopelia decaocto</i>
Killdeer	<i>haradrius vociferus</i>
Red-winged blackbird	<i>Agelaius phoeniceus</i>

7/11/24 Western Kingbird

7/17/24 Bewick's wren	<i>Thryomanes bewickii</i>
Western Wood-Pee wee	<i>Contopus sordidulus</i>
Western Meadowlark	<i>Sturnella neglecta</i>

7/18/24 Killdeer	
Black Phoebe	<i>Sayornis nigricans</i>

7/27/24 California quail	<i>Callipepla californica</i>
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7/29/24 Western Wood-Pee wee	<i>Contopus sordidulus</i>
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8/7/24 Wrentit	<i>Chamaea fasciata</i>
Black Phoebe	<i>Sayornis nigricans</i>

8/8/24 House sparrow	<i>Passer domesticus</i>
House Wren	<i>Troglodytes aedon</i>

8/9/24 Savannah sparrow (unsure)	<i>Passerculus sandwichensi.</i>
Bushtit	<i>Psaltiriparus minimus</i>
Bewick's wren	<i>Thryomanes bewickii</i>

8/13/24 American Goldfinch	<i>Spinus tristis</i>
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8/15/24 California Quail	<i>Callipepla californica</i>
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8/16/24 Black Phoebe	<i>Sayornis nigricans</i>
Osprey	<i>Pandion haliaetus</i>

8/22/24 Northern Flicker	<i>Colaptes auratus</i>
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8/28/24 Osprey	<i>Pandion haliaetus</i>
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Visual ID only Golden Eagle
 Sandhill Crane
 White Egret
 Blue Heron
 Double-crested Cormorant
 Red duck (unsure of spp.)
 Canadian Goose
 Eurasian Wigeon (unsure)

Scott River 2023 - Observed Plant List

Western Goldentop	<i>Euthamia occidentalis</i>
Mountain tarweed	<i>Madia glomerata</i>
Hairy false goldenaster	<i>Heterotheca villosa</i>
Willow dock	<i>Rumex salicifolius</i>
Jerusalem oak goosefoot	<i>Dysphania botrys</i>
White sagebrush	<i>Artemisia ludoviciana</i>
American wild mint	<i>Mentha canadensis</i>
Rough hedgenettle	<i>Stachys rigida</i>
Redroot pigweed	<i>Amaranthus retroflexus</i>
Bouncing-bet	<i>Saponaria officinalis</i>
Spearmint	<i>Mentha spicata</i>
Western white clematis	<i>Clematis ligusticifolia</i>
Bitter dock	<i>Rumex obtusifolius</i>
Bird's food trefoil	<i>Lotus corniculatus</i>
Smooth horsetail	<i>Equisetum Laevigatum</i>
Chicory	<i>Cichorium intybus</i>
Shortpod mustard	<i>Hirschfeldia incana</i>
St. John's Wort	<i>Hypericum perforatum</i>
California Brickelbush	<i>Brickellia californica</i>
True forget-me-not	<i>Mysotis scorpioides</i>
Silver lupine	<i>Lupinus albifrons</i>
Hairy buttercup	<i>Ranunculus sardous</i>
Yellow flag iris	<i>Iris pseudacorus</i>
Showy milkweed	<i>Asclepias speciosa</i>
Arroyo lupine	<i>Lupinus succulentus</i>
Oxeye daisy	<i>Lucanthemum vulgare</i>
Tarragon	<i>Artemisia dracuncul</i>
Seep monkeyflower	<i>Erythranthe guttata</i>
Giant red Indian paintbrush	<i>Castilleja miniata</i>
Purple loosestrife	<i>Lythrum salicaria</i>
Rough horsetail	<i>Equisetum hyemale</i>
Blazing star	<i>Mentzelia laevicaulis</i>
Slender phlox	<i>Phlox gracilis</i>
California poppy	<i>Eschscholzia californica</i>
Common horsetail	<i>Equisetum arvense</i>
Old man's beard	<i>Clematis ligusticifolia</i>
Hayfield tarweed	<i>Hemizonia congesta</i>
Sticky cinquefoil	<i>Drymocallis glandulosa</i>
Mountain sweet cicely	<i>Osmorhiza berteroi</i>
Henbit	<i>Lamium amplexcaule</i>
Bulbous bluegrass	<i>Poa bulbosa</i>
European speedwell	<i>Veronica beccabunga</i>
American eelgrass	<i>Vallisneria americana</i>

Scott River 2023 - Observed Plant List

Hardstem tule	<i>Schoenoplectus actus</i>
Spiral ditchgrass	<i>Ruppia cirrhosa</i>
Reed canary grass	<i>Phalaris arundinacea</i>
Common spikerush	<i>Elocharis palustris</i>
Broadleaf cattail	<i>Typha latifolia</i>
Water speedwell	<i>Veronica anagallis-aquatica</i>
Western waterweed	<i>Elodea nuttallii</i>
Curly-leaf pondweed	<i>Potamogeton crispus</i>
Sandbar willow	<i>Salix exigua</i>
Purple willow	<i>Salix purpurea</i>
Lewis' Mock Orange	<i>Philadelphus lewisii</i>
Shining willow	<i>Salix lucida</i>
Chokecherry	<i>Prunus virginiana</i>
White willow	<i>Salix alba</i>
Red willow	<i>Salix laevigata</i>
Northern California Black Walnut	<i>Juglans hindsii</i>
Arroyo willow	<i>Salix lasiolepis</i>
Climbing Rose	<i>Rosa setigera</i>
White alder	<i>Alnus rhombifolia</i>
Apple	<i>Malus pumila</i>
Chinese wolfberry	<i>Lycium barbarum</i>
California wildrose	<i>Rosa californica</i>
Multiflora rose	<i>Rosa multiflora</i>
Black alder	<i>Alnus glutinosa</i>
Narrowleaf willow	<i>Salix exigua</i>
Dog rose	<i>Rosa canina</i>
Western white clematis	<i>Clematis ligusticifolia</i>
Balsam poplar	<i>Populus balsamifera</i>
Oregon Ash	<i>Fraxinus latifolia</i>
Cherry plum	<i>Prunus cerasifera</i>
Beach plum	<i>Prunus maritima</i>
Menzies fiddleneck	<i>Amsinckia menziesii</i>
Redstem stork's bill	<i>Erodium cicutarium</i>
Spring draba	<i>Draba verna</i>
Spotted knapweed	<i>Centaurea stoebe</i>
Bouncing bet	<i>Saponaria officinalis</i>
Miner's lettuce	<i>Claytonia perfoliata</i>
Dyer's woad	<i>Isatis tinctoria</i>
Poison hemlock	<i>Conium maculatum</i>
Shortpod mustard	<i>Hirschfeldia incana</i>
Maiden blue Eyed mary	<i>Collinsia parviflora</i>
Nootka rose	<i>Rosa nutkana</i>
Black madick	<i>Meibomia lupulina</i>
Himalayan blackberry	<i>Rubus armeniacus</i>
American vetch	<i>Vicia americana</i>

2023 Scott River - Willows in order of Observed Dominance

1) *Salix exigua* var. *hindsiana* (Narrow-leaf willow, Sandbar willow, Coyote willow)



2023 Scott River - Willows in order of Observed Dominance

2) *Salix lucida* (ssp. *lasiandra*) -(Shining Willow, Pacific or yellow tree willow, Western Black willow)



3) *Salix lasiolepis*, (Arroyo willow)



2023 Scott River - Willows in order of Observed Dominance

4) **Salix laevigata** (Red willow, polished willow)



5) **Salix alba** (a few tall trees, unconfirmed)

6) **Salix purpea** (one sighting, unconfirmed) and **Salix nigra** (one sighting, unconfirmed)

Additional Trees in Section (to add to plant list):

Black Cottonwood (*Populus balsamifera* L. ssp. *trichocarpa*), oak, walnut, chokecherry, (add to list) ponderosa pine?, Yellow Flag Iris (*Iris pseudacorus*), Alder, California poppy, St. John's Wort, Wild parsnip, cattail, seep monkeyflower (*Erythranthe guttata*), showy milkweed