

Upper Stony Creek Fishery Management Guidelines

Colusa, Glenn, and Lake counties

State of California

Natural Resources Agency

Department of Fish and Wildlife



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North Central Region

Heritage and Wild Trout Program

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Executive summary

California Fish and Game Code (Chapter 7.2, Section 1726.4 (b)) states that it is the intent of the Legislature that “the department [specifically, the California Department of Fish and Wildlife (CDFW) Heritage and Wild Trout Program (HWTP)], in administering its existing [heritage and] wild trout program, shall maintain an inventory of all California trout streams and lakes to determine the most suitable angling regulations for each stream or lake. The department shall determine for each stream or lake whether it should be managed as a wild trout fishery, or whether its management should involve the temporary planting of native trout species to supplement wild trout populations that is consistent with this chapter.” Section 1726.4 (b) additionally states that “biological and physical inventories prepared and maintained for each stream, stream system, or lake shall include an assessment of the resource status, threats to the continued well-being of the fishery resource, the potential for fishery resource development, and recommendations, including necessary changes in the allowed take of trout, for the development of each stream or lake to its full capacity as a fishery.”

Furthermore, California Fish and Game Code (Chapter 7.2, Section 1727 (d)) requires that the CDFW “shall prepare and complete management plans for all wild trout waters not more than three years following their initial designation by the commission, and to update the management plan every five years following completion of the initial management plan.” For clarification, wild trout waters, as stated above, represent waters that have been formally designated by the California Fish and Game Commission as Heritage and/or Wild Trout Waters.

Wild Trout Waters are those that support self-sustaining trout populations, are aesthetically pleasing and environmentally productive, provide adequate catch rates in terms of numbers or size of trout, and are open to public angling. Wild Trout Waters may not be stocked with catchable-sized hatchery trout. Heritage Trout Waters are a sub-set of Wild Trout Waters and highlight wild populations of California’s native trout that are found within their historic drainages.

In an effort to comply with existing policy and mandates, the HWTP has prepared these fishery management guidelines for Upper Stony Creek. This document is intended largely as an operations guide for internal planning purposes and to communicate management direction to the public, other agencies, and trout angling organizations. These guidelines are intended to provide direction and list actions necessary to sustain the recreational fishery for the benefit and enjoyment of the angling public. However, actions associated with this guidance document are initiated independently, thus any environmental review/permits needed to implement the actions are separate from this guidance document itself.

Resource status

Area description

Stony Creek is located northeast of Clear Lake in the Coast Ranges, approximately 10 miles west of the town of Stonyford (Glenn, Colusa and Lake counties). Stony Creek flows eastward from the Coast Ranges, entering the Sacramento River from the west. The upper Stony Creek Heritage and Wild Trout designation includes Stony Creek and all tributaries upstream of Mine Camp Campground. The North, South, and Middle forks of Stony Creek are its main tributaries. Upper Stony Creek is unique since it supports the only substantial wild coastal rainbow trout fishery (*Oncorhynchus mykiss irideus*) on the west side of the Sacramento Valley.

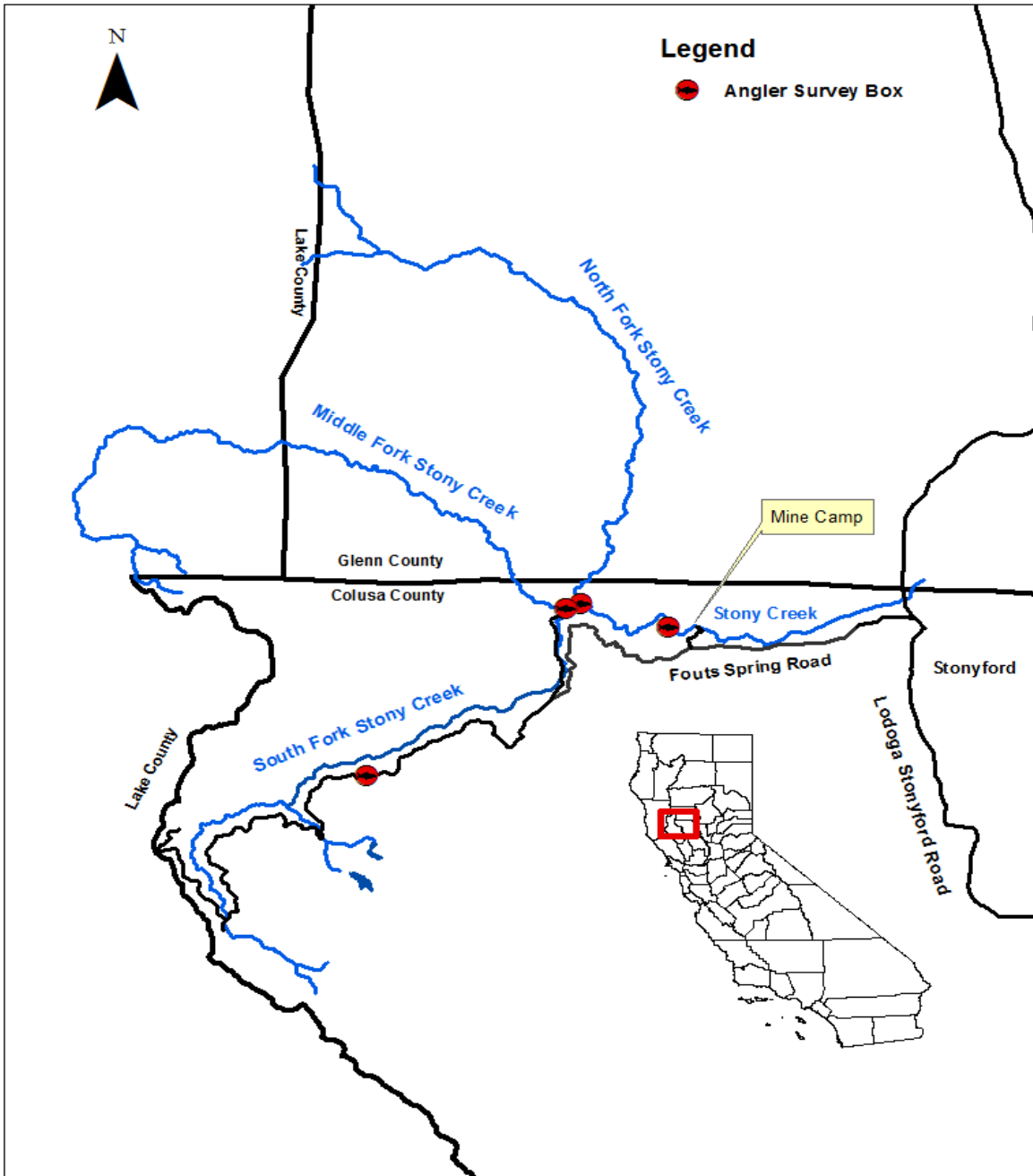
The Middle Fork Stony Creek is the largest of the three main tributaries. The peaks of Snow Mountain are situated between the middle and south forks of Stony Creek and are higher than the surrounding crest of the Coast Ranges. As a consequence, they capture more snow pack which provides suitable stream temperatures for coastal rainbow trout and other cold water-dependent aquatic organisms. The Middle Fork Stony Creek originates from springs on the north slopes of West Snow Mountain Peak, at an elevation of approximately 7038 feet, and terminates at the confluence with the South Fork Stony Creek at an elevation of approximately 2000 feet. At higher elevations, the Middle Fork Stony Creek flows through mixed conifer forest while, at lower elevations, it flows through oak forest. This tributary flows approximately 14 miles from its source to the confluence. Approximately 12 of the 14 miles of stream are within the Snow Mountain Wilderness Area (Mendocino National Forest). Access to the Middle Fork Stony Creek is limited to three trailheads.

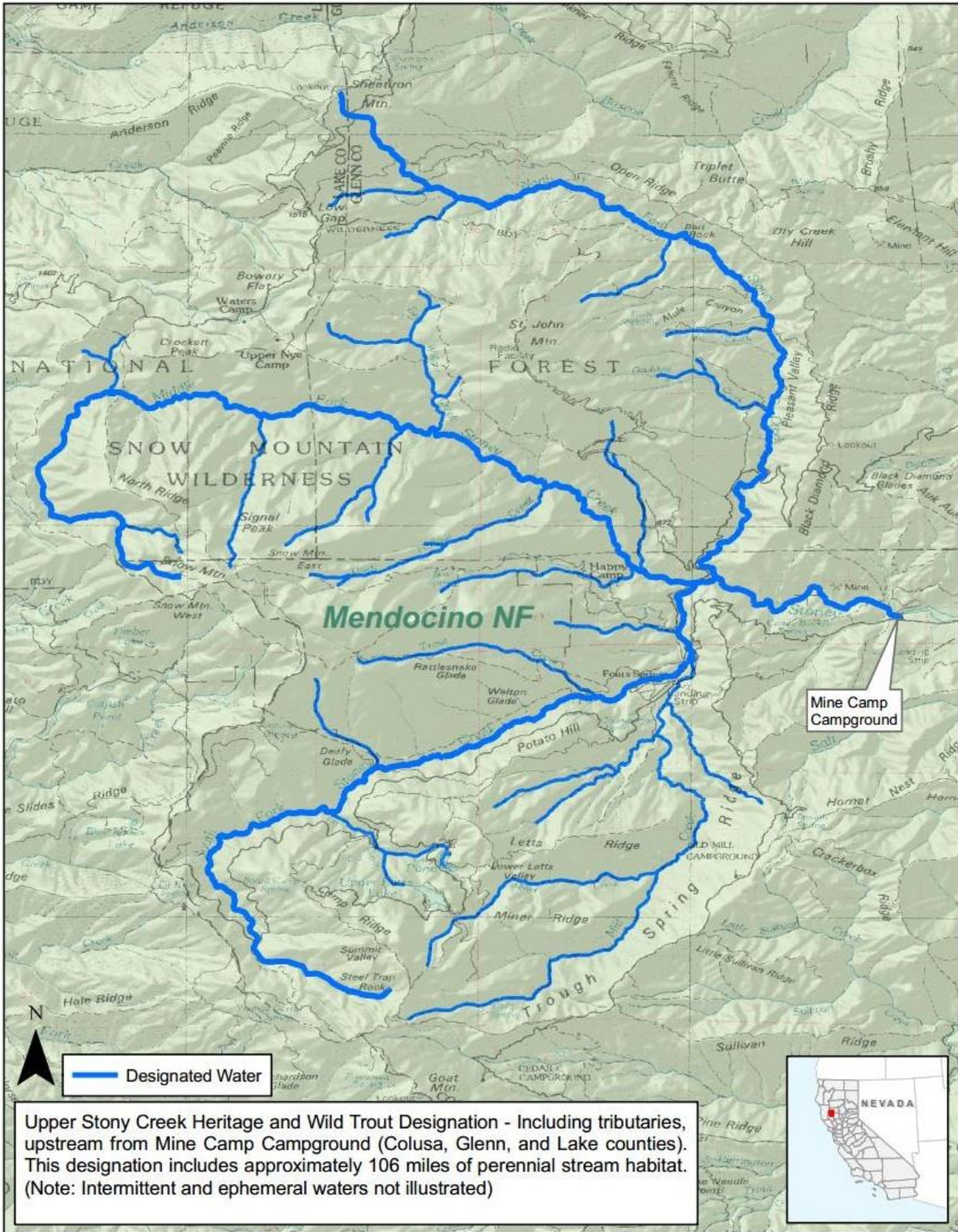
The South Fork Stony Creek originates at an elevation of approximately 5200 feet and terminates at the confluence with the Middle Fork Stony Creek, just downstream of Red Bridge, at an elevation of approximately 2000 feet. This tributary flows for approximately 13 miles from its source to the confluence. All of the South Fork Stony Creek is within the Mendocino National Forest. A short reach forms the southern boundary of the Snow Mountain Wilderness Area. Letts Lake and Lily Pond are the only two lakes within the upper Stony Creek drainage and are both associated with Letts Creek.

The North Fork Stony Creek originates on the south slope of Sheetiron Mountain, at an elevation of approximately 6400 feet, and terminates at the confluence with the Middle Fork Stony Creek. This tributary flows for approximately 13 miles from its source to the confluence. Most of the North Fork Stony Creek is within the Mendocino National Forest but some portions flow through private property inholdings.

Off-highway vehicle (OHV) use is a very popular recreational activity on the Mendocino National Forest. A heavily used OHV area is centered at Davis Flats and Fouts Springs, located on the South Fork Stony Creek near the confluence with the Middle and North forks Stony Creek. This area offers five campgrounds and access to many miles of trails for OHV use. North Fork Campground is also located nearby on the North Fork Stony Creek.

Area maps





Upper Stony Creek Designated Heritage and Wild Trout Water

Land ownership/administration

- | | |
|--|--|
| <input checked="" type="checkbox"/> United States Forest Service | <input type="checkbox"/> Bureau of Land Management |
| <input type="checkbox"/> State Parks | <input type="checkbox"/> National Parks |
| <input type="checkbox"/> Fish and Wildlife | <input checked="" type="checkbox"/> Private |
| <input type="checkbox"/> Other | |

Public access

- | | | |
|--|--|-------------------------------|
| <input checked="" type="checkbox"/> Roadside | <input checked="" type="checkbox"/> Remote/hike-in | <input type="checkbox"/> Boat |
|--|--|-------------------------------|

Designations

- | | |
|--|--|
| <input checked="" type="checkbox"/> Wild Trout Water | <input checked="" type="checkbox"/> Heritage Trout Water |
| <input type="checkbox"/> Federal Wild and Scenic River | <input checked="" type="checkbox"/> Wilderness |
| <input type="checkbox"/> Other | |

Fishery description

Upper Stony Creek contains a wild population of coastal rainbow trout that is isolated from Sacramento River steelhead and resident coastal rainbow trout populations by several dams and water diversions. Stony Creek and the lower reaches of the North, South and Middle forks also contain riffle sculpin (*Cottus gulosus*), golden shiner (*Notemigonus crysoleucas*), California roach (*Lavinia symmetricus*), and speckled dace (*Rhinichthys osculus*). It should be noted that a relatively small number of golden shiners were detected only once, in a 1988 electrofishing survey, and have not been documented since. It is unknown if a viable population currently exists in the Stony Creek drainage. Coastal rainbow trout are the only fish species found in the upper reaches of the three forks.

Anglers fishing for trout in the Middle Fork Stony Creek have reported catch rates >3.0 fish/hr, well above the HWTP “fast action” fishery threshold of >2.0 fish/hr. The average angler catch rate, from 2003 through 2011, was 2.5 trout per hour (Table 1). Angler survey boxes were installed at Mine Camp, North Fork Campground, and on the South Fork Stony Creek at Deafy Glade Trailhead in 2010. A total of 60 anglers reported an average catch rate of 3.0 fish/hr. in the North Fork Stony Creek and 3.4 fish/hr. in South Fork Stony Creek, both of which are high catch rates (Table 2).

Stony Creek, near Mine Camp, area can produce larger trout than its comparatively smaller tributaries. Over 72% of the catch from the Mine Camp angler survey box was reported as trout ≥12.0 inches total length. Anglers also reported landing coastal rainbow trout >18.0 inches. By comparison, only 4% of the trout catch was reported ≥12.0 inches total length in the Middle Fork Stony Creek from 2003-2009 (Table 3).

Anglers reported keeping proportionally more trout from the main-stem in the Mine Camp area than from the Middle Fork Stony Creek (Tables 3, 4 and 5). Current fishing regulations permit harvest in the main-stem (near Mine Camp) during part of the year, so further evaluation of the extent harvest may be influencing the trout population in this part of the system is warranted. Particularly since this is the only part of the drainage that appears to produce trophy-sized fish, which may be more susceptible to higher rates of harvest (e.g., anglers may be more tempted to retain larger fish than small ones for a variety of reasons).

Water Sources

Spring

Rain

Snow

Tailwater

Gradient

Low (< 2%)

Medium (2-4%)

High (>4%)

N/A

Fish species

Common name	Scientific name	Native (Y/N)	Listing status
coastal rainbow trout	<i>Oncorhynchus mykiss irideus</i>	Y	None
riffle sculpin	<i>Cottus gulosus</i>	Y	None
golden shiner	<i>Notemigonus crysoleucas</i>	Y	None
California roach	<i>Lavinia symmetricus</i>	Y	None
speckled dace	<i>Rhinichthys osculus</i>	Y	None

Other aquatic species

Common name	Scientific name	Native (Y/N)	Listing status
foothill yellow-legged frog	<i>Rana boylei</i>	Y	Species of Special Concern
western pond turtle	<i>Actinemys marmorata</i>	Y	Species of Special Concern
Pacific giant salamander	<i>Dicamptodon ensatus</i>	Y	None

Fish population estimates

Water	Number of sections surveyed	Year(s)	Survey type	Reference data/summary report
Middle Fork Stony Creek	1	1988	Multiple-pass electrofish	Heritage and Wild Trout Program Database
Middle Fork Stony Creek	3	1989	Multiple-pass electrofish	Heritage and Wild Trout Program Database
Middle Fork Stony Creek	2	1992	Multiple-pass electrofish	Heritage and Wild Trout Program Database
Middle Fork Stony Creek	1	2001	Multiple-pass electrofish	Heritage and Wild Trout Program Database
Stony Creek	7	2008	Direct observation	Weaver and Mehalick 2008
Middle Fork Stony Creek	25	2008	Direct observation	Weaver and Mehalick 2008
Middle Fork Stony Creek	1	2008	Genetic tissue acquisition	Weaver and Mehalick 2008
Middle Fork Stony Creek	1	2008	Hook and line	Weaver and Mehalick 2008
North Fork Stony Creek	5	2008	Direct observation	Weaver and Mehalick 2008
South Fork Stony Creek	3	2008	Direct observation	Weaver and Mehalick 2008
North Fork Stony Creek	2	2009	Multiple-pass electrofish	Weaver and Mehalick 2009
North Fork Stony Creek	1	2009	Hook and line	Weaver and Mehalick 2009
South Fork Stony Creek	3	2009	Multiple-pass electrofish	Weaver and Mehalick 2009
South Fork Stony Creek	1	2009	Hook and line	Weaver and Mehalick 2009

Angler survey data

Water	Date range	Survey type	Reference data/summary report
Middle Fork Stony Creek	2003-2011	Angler survey box	HWTP database
North Fork Stony Creek	2010-2011	Angler survey box	HWTP database
South Fork Stony Creek	2010-2011	Angler survey box	HWTP database
Stony Creek at Mine Camp	2010-2011	Angler survey box	HWTP database

Angling regulations

Stony Creek, and tributaries (Colusa, Glenn, and Lake counties):

Body of water	Open season and special regulation	Daily bag and possession limit
(A) From the headwaters downstream to the diversion dam west of Stonyford in the center of Section 35, T18N, R7W, except the portion of Stony Creek Middle Fork from Red Bridge upstream	Last Saturday in April through November 15.	5 per day 10 in possession
	November 16 through the Friday preceding the last Saturday in April. Only artificial lures with barbless hooks may be used	0
(B) Stony Creek, Middle Fork from Red Bridge upstream	Last Saturday in April through November 15. Only artificial lures with barbless hooks may be used	2
	November 16 through the Friday preceding the last Saturday in April. Only artificial lures with barbless hooks may be used	0

Known stressors

Angler survey box data indicate that anglers keep a relatively high percentage of trout from Stony Creek in the area of Mine Camp but many fewer from its tributary streams. Trout reported kept from the main-stem were also larger than those kept from the tributaries. It is possible overharvest is occurring in the Mine Camp area, limiting this portion of the fishery's potential to provide high catch rates or larger fish. The main-stem of Stony Creek has been sampled with backpack electrofishing only once (2008) so additional surveys are needed to evaluate this issue.

Management

Management goals and objectives

- Fast action (catch rates > 2 fish/hour)
- Trophy (trout > 18 inches)
- Heritage trout
- Other

Monitoring

Water	Date range (month/year)	Survey type	Survey interval
Stony Creek	July-September	Electrofishing/snorkel	Every 5 years
North Fork Stony Creek	July-September	Electrofishing	Every 5 years
South Fork Stony Creek	July-September	Electrofishing	Every 5 years
Middle Fork Stony Creek	July-September	Electrofishing/snorkel	Every 5 years
Stony Creek	Year-round	Angler survey box	Annual

Angling regulations

Current angling regulations for the upper Stony Creek fishery were adopted to provide protection for its trout populations, while providing public recreational opportunities. The CDFW is currently in the process of simplifying angling regulations and, if adopted, the following changes are proposed to be made to the regulations for upper Stony Creek:

Body of water	Open season and special regulation	Daily bag and possession limit
(A) From the headwaters downstream to the diversion dam west of Stonyford in the center of Section 35, T18N, R7W, except the portion of Stony Creek Middle Fork from Red Bridge upstream	All year	5 per day 10 in possession
(B) Stony Creek, Middle Fork from Red Bridge upstream	All year, artificial lures with barbless hooks only	Zero

The CDFW intends to monitor the fishery, along with angler satisfaction/preferences, to guide and direct any future regulatory changes as warranted. Regulations will be used in an adaptive manner to optimize angler opportunities, while maintaining a high quality recreational fishery in accordance with management goals and objectives outlined in these guidelines.

Management actions

Surveys should be conducted every five years to evaluate population age and size class structure, develop density estimates, and document habitat conditions in order to protect this unique fast action fishery. The HWTP recommends initial focus on the main-stem Stony Creek in the vicinity of Mine Camp, given the higher percentage of trout reported kept in this area than other portions of the drainage. Additional population estimates and evaluation of size class structure should be performed via electrofishing in the main-stem Stony Creek. The intent of the existing and proposed regulations for upper Stony Creek is to maintain a fast action fishery which is defined as a catch rate of two trout per hour or greater. Angler survey box data should be used as part of ongoing evaluation of regulation efficacy.

Adaptive strategies

This document provides guidance and management direction for wild trout resources in the upper Stony Creek fishery. These recommendations are based on existing conditions and should be used in accordance with updated information over time. Long-term monitoring of the fishery and associated angler information should play a central role in future management prescriptions. Any changes to the prescribed management goals/objectives should be based on updated quantifiable data, stakeholder input, HWTP Policy, the Strategic Trout Plan, and collaborative HWTP review.

Table 1. Catch data by year from angler survey boxes on the Middle Fork Stony Creek (2003-2011)

Year	Number of forms	Total hours fished	Total catch	Catch per hour	Catch per angler	Hours per angler
2003	30	157	329	2.1	11	5.2
2004	41	152.5	375	2.5	9.1	3.7
2005	34	145	306	2.1	9	4.3
2006	17	69	191	2.8	11.2	4.1
2007	26	102.3	185	1.8	7.1	3.9
2008	13	30	138	4.6	10.6	2.3
2009	20	74	233	3.1	11.7	3.7
2011	10	26	22	0.8	2.2	2.6
Average	24	94.5	222	2.7	10	3.9

Table 2. Catch data by year from angler survey boxes on the North and South forks Stony Creek and main-stem Stony Creek (2010-2011)

Year	Angler survey box location	Number of forms	Total hours fished	Total catch	Catch per hour	Catch per angler	Hours per angler
2010	Stony Creek	21	53.7	95	1.8	4.5	2.6
2010	South Fork Stony Creek	25	61.3	95	1.6	3.8	2.5
2011	Stony Creek	6	24.5	47	1.9	7.8	4.1
2011	South Fork Stony Creek	6	14	47	3.4	7.8	2.3
2011	North Fork Stony Creek	2	4	12	3	6	2

Table 3. Percentage of trout reported as released by year and size class from the Middle Fork Stony Creek (2003-2011)

Year	Total	< 6.0"	6.0"-7.9"	8.0"-9.9"	10.0"-11.9"	12.0"-13.9"	14.0"-15.9"	> 16.0"
2003	95	35	24	26	7	3	0	0
2004	98	26	39	22	8	2	1	0
2005	99	25	31	25	12	6	0	0
2006	98	18	45	24	13	0	0	0
2007	97	9	42	30	10	4	1	0
2008	92	11	61	0	16	3	3	3
2009	96	34	26	21	13	1	0	0
2011	23	29	3	13	0	0	0	0
Overall	97	22	38	21	11	3	1	0

Table 4. Number of trout reported caught by size class and percent kept vs. released in main-stem Stony Creek (2010)

	Total	< 6.0"	6.0"-7.9"	8.0"-9.9"	10.0"-11.9"	12.0"-13.9"	14.0"-15.9"	16.0"-17.9"	≥18.0"
Kept	48	0	11	19	11	4	1	0	3
Released	52	7	19	11	11	3	0	1	0
Total	100	7	29	29	21	7	1	1	3

Table 5. Number of trout reported caught by size class and percent kept vs. released in main-stem Stony Creek (2011)

	Total	< 6.0"	6.0"-7.9"	8.0"-9.9"	10.0"-11.9"	12.0"-13.9"	14.0"-15.9"	16.0"-17.9"	≥18.0"
Kept	28	0	0	0	9	6	6	6	0
Released	72	0	0	2	17	11	19	17	6
Total	100	0	0	2	26	17	26	23	6