

Trout Management in Dane County



Why we survey: Our purpose is to describe the **size structure** and **condition** of major fish populations of recreational interest, assess regulation, and suggest necessary management actions. We assess the condition of the population by looking at the three dynamic rates: recruitment, age/growth, and mortality. Surveys also evaluate the response of a stream to habitat work, land and agricultural practices, as well as disturbances like spills.

What we survey: Fish community composition and species relative abundance are estimated over the entire length of each station using catch per effort (CPE) sampling procedures. CPE is the number of fish caught divided by the distance that was electro-fished.

Catch Per Unit Effort

$$CPUE = \frac{\text{Number of fish caught}}{\text{Distance Sampled}}$$

How we survey: Trout surveys are typically performed by three person crew using tow barge electro-fishing gear. The area sampled is usually 35 times the stream width; a 10' wide stream would receive 350' of effort. This length is based on the distance necessary to sample more than three run-riffle-pool sequences. If a stream has well-developed pool-riffle structure, then each station usually starts and ends at the base of a riffle to help facilitate fish capture. A single electro-fishing run is made from the downstream to upstream end of the station. This constitutes the one and only sampling pass. All fish greater than 1 inch in total length are collected. At the end of the pass, all trout are measured. Work is done in late spring – early summer before vegetation affects efficiency

Trout Stream Classification

- Class I:** A class I trout stream is a stream or portion thereof with a self sustaining population of trout that requires no stocking.
- Class II:** A class II trout stream is a stream or portion thereof with an existing population of trout that has substantial survival from one year to the next and requires some stocking to fully utilize trout habitat or sustain the fishery.
- Class III:** A class III trout stream is a stream or portion thereof that requires annual stocking of trout to provide a significant harvest, and does not provide habitat suitable for the survival of trout throughout the year, or for the natural reproduction of trout.

Detailed survey reports and maps can be found at : <http://dnr.wi.gov/fish/reports/> and <http://dnr.wi.gov/fish/faq/wheretofish.html>

Maps detailing public ownership and easement for Dane County trout streams are posted at: <http://dnr.wi.gov/fish/species/trout/streammaps.html>

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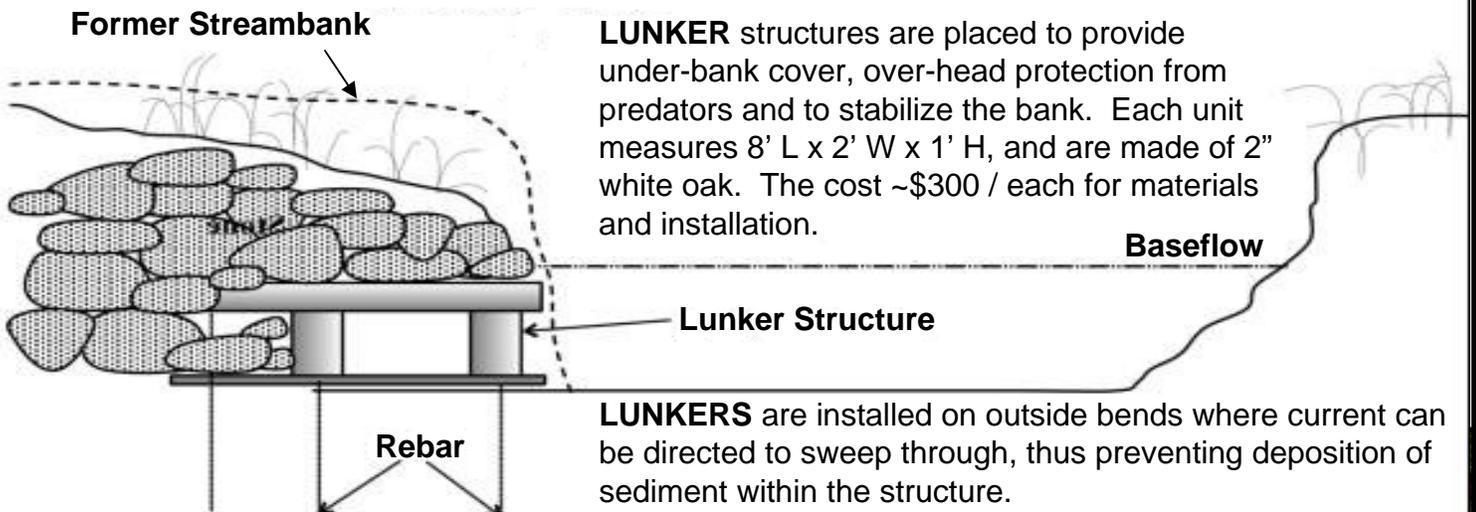


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Did you know?

- Most brown trout stocked are timber coulee strain (wild origin) fingerlings (1.5 - 3").
- Brook trout spawn in late October / early November. Brown trout spawn in late November – early December.
- Trout live about 6 years, although large fish may attain 9 years. Brook trout life expectancy is generally shorter... 4 years.
- Cold water streams harbor simple communities consisting of 3-6 fish species. The number of fish species in a warm water stream (e.g. Yahara River) may exceed 20.
- Dane county has 35 streams that contain trout. Many are unclassified, having experienced a shift to cold water due to changes in land use (e.g. CRP). These are found almost exclusively in the SW corner of the county.
- Trout habitat work costs in excess of \$18.00 / foot. Maintenance work averages \$10,000 / mile
- Stocking information is posted at: <http://dnr.wi.gov/fish/pages/stocking.html>
- What is the trout in the background (found in Dane County streams)? (Brook x Brown) Tiger trout

L.U.N.K.E.R.S. – Little Underwater Neighborhood Keeper Encompassing Rheotactic Salmonids



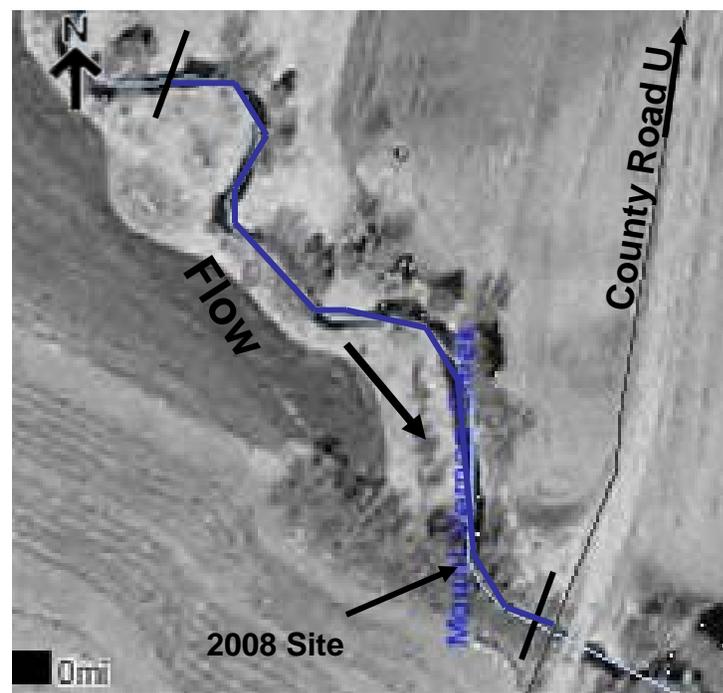
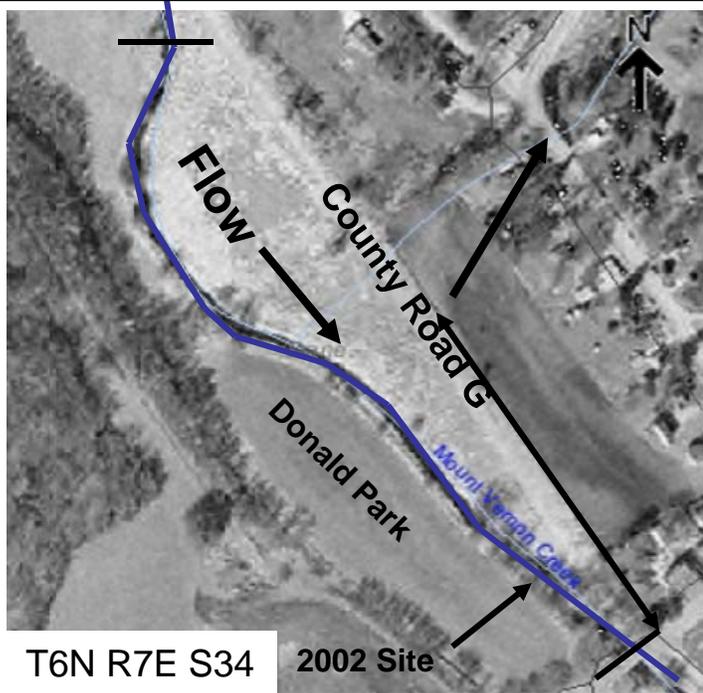
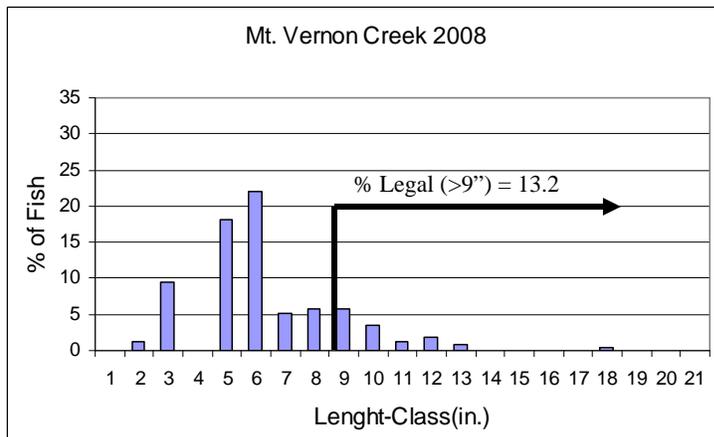
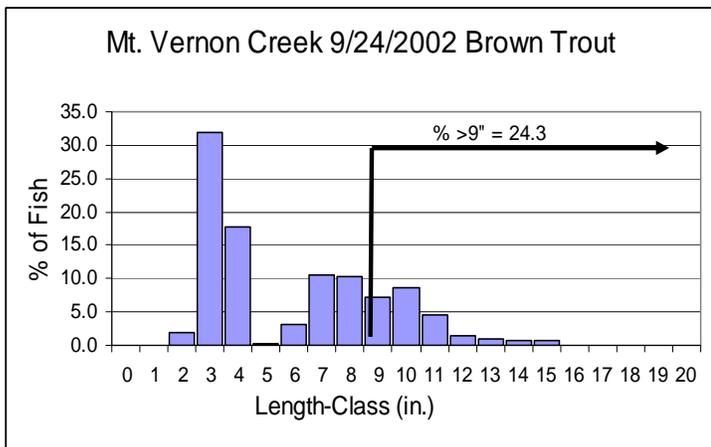
Mt. Vernon Creek

Stream Summary: Mt. Vernon Creek

Mount Vernon Creek is an Outstanding Resource Water and Class I trout stream (self sustaining trout population, no stocking). Mt. Vernon Creek has abundant coarse woody debris and in-stream vegetation. Deep pools and long riffle-run habitats hold multiple year-classes and sizes of trout. Mt. Vernon Creek is held almost completely in public easement or ownership. The surrounding geography and geology make it a unique spring creek resource and high quality fishery. Brushing and corridor maintenance are ongoing management activities.

Current regulation: Between posted signs at Cty U and Hwy 92 (Catch and release all trout, artificial lures only) remaining water (9" size limit, 3 fish bag)

Brown Trout:	7/12/1997	9/24/2002	7/30/2008
Total Captured:	375	494	264
Average Length (in):	7.4	6.5	6.7
Length Range (in):	1.9-16.8	2.3-15.4	2.3-18.1
% Legal (>9"):	24.5	24.3	13.2
Catch Per Effort (>9"):	420 / mile	389 / mile	226 / mile
Catch Per Effort (All):	1705 / mile	1254 / mile	1704 / mile



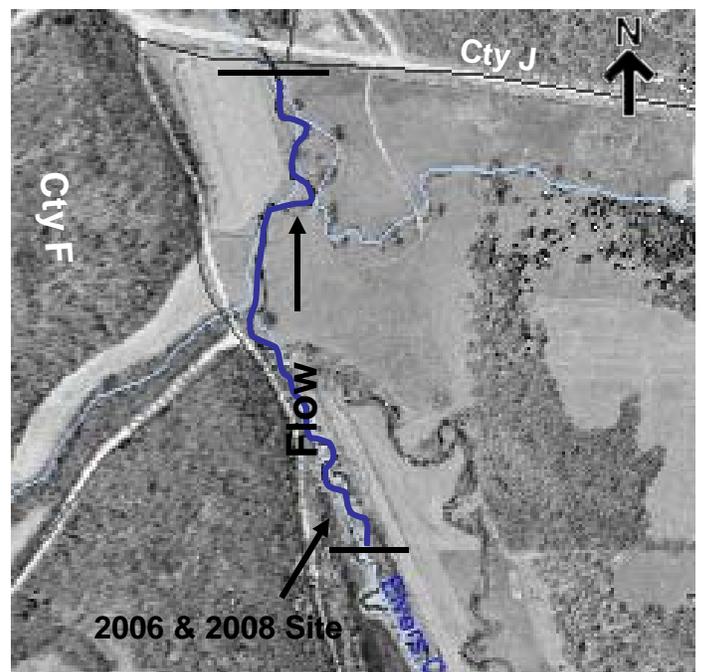
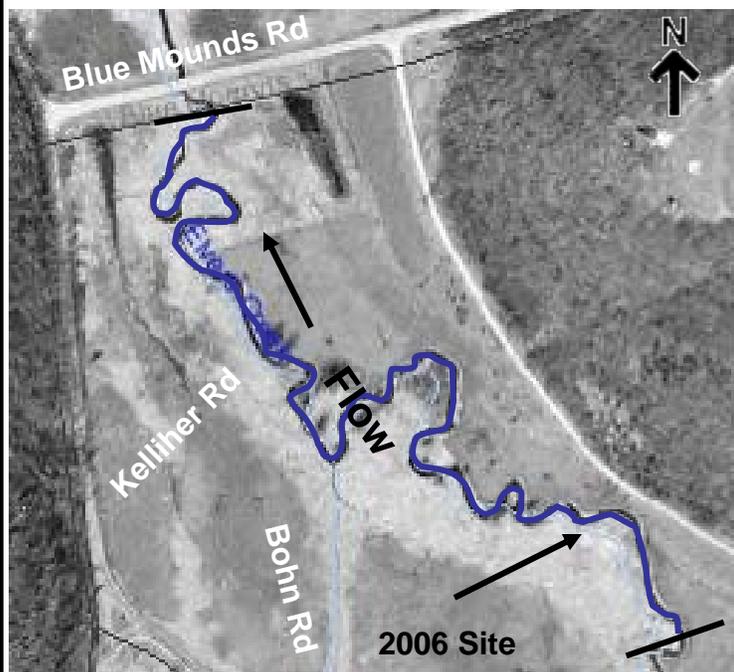
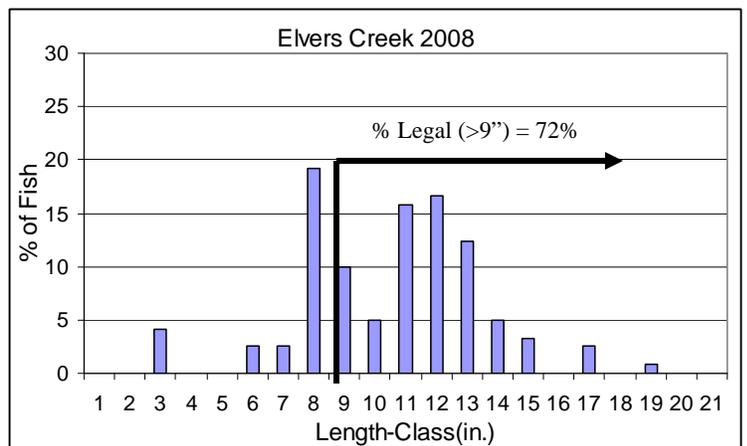
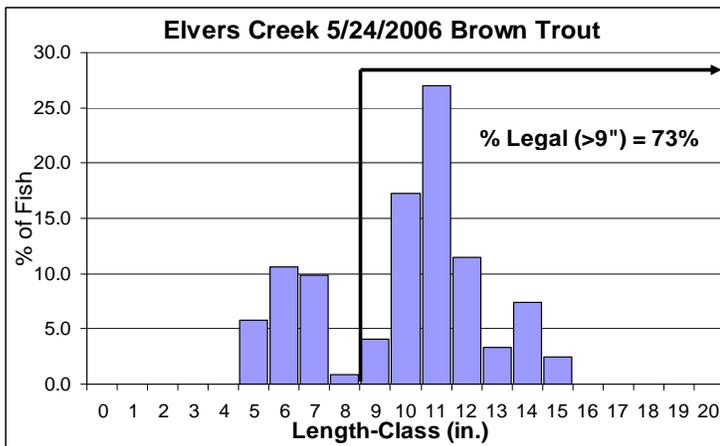
Elvers Creek

Stream Summary: Elvers Creek

Elvers Creek is a Class II trout stream that supports better-than-average numbers of trout with good numbers of quality sized fish. Brown trout stocking of small wild strain spring fingerlings occurs annually. Beaver dams, bank erosion, and woody vegetation along the corridor are management challenges. Elvers Creek has potential to produce more and larger fish due to its' size and adequate pool and riffle habitat. Stream bottom substrates can facilitate natural reproduction.

Current regulation: 3 fish bag, 9" size limit

Brown Trout:	7/1/2003	5/24/2006	7/15/2008
Total Captured:	241	122	120
Average Length (in):	7.0	10.4	10.9
Length Range (in):	1.9-15.0	5.2-15.5	3.2-18.2
%Legal (>9"):	24.5	73	72
Catch per effort(>9"):	124 / mile	153 / mile	254 / mile
Catch per effort (All):	507 / mile	209 / mile	355 / mile



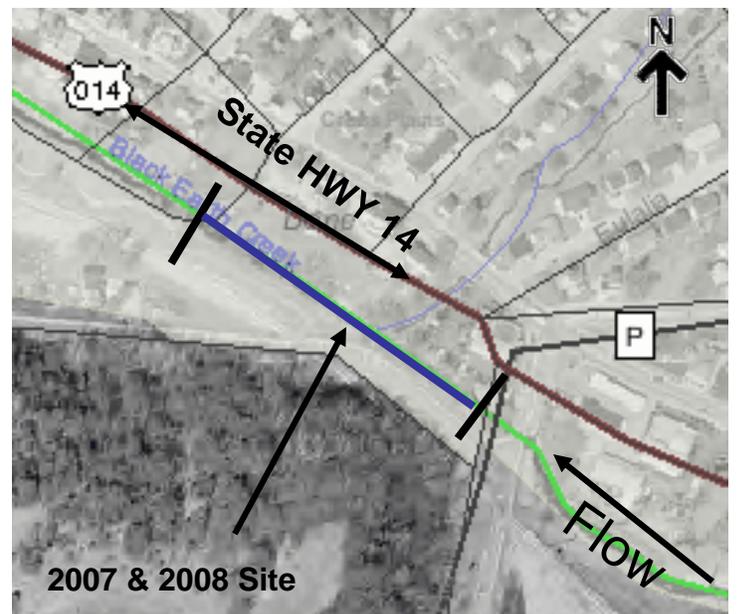
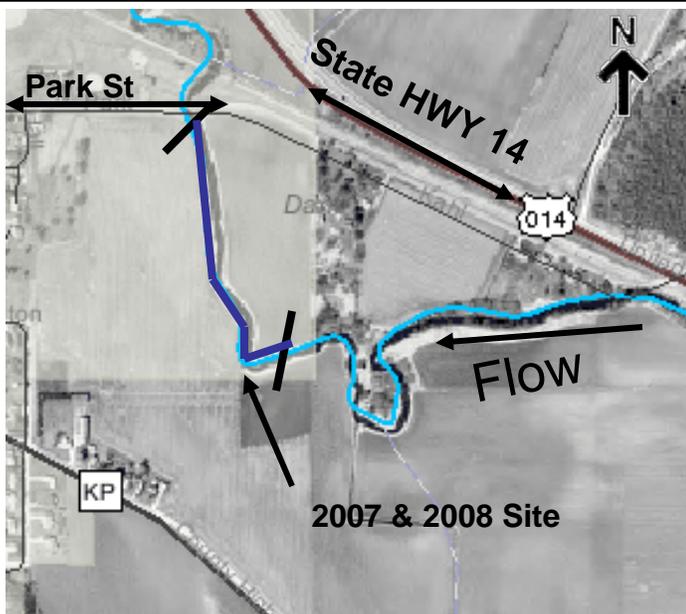
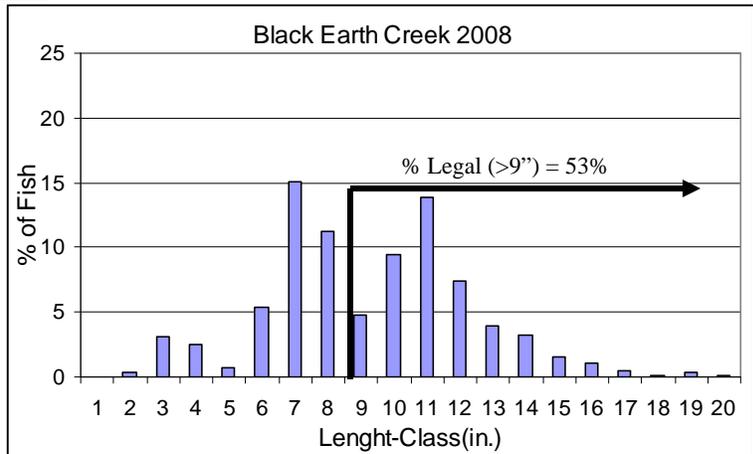
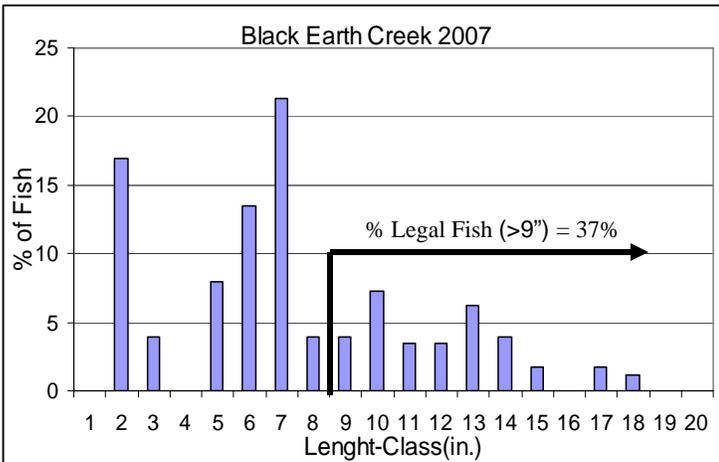
Black Earth Creek

Stream Summary: Black Earth Creek

Black Earth creek (BEC) is the most well known and arguably, popular, trout stream in Dane County and south central Wisconsin. As such, it has received extensive and ongoing survey, habitat, and easement maintenance work. BEC receives NO stocking of brown trout and relies on natural reproduction to support better than average trout numbers. Because of its size, opportunities are plentiful for anglers wishing to fish natural bait, artificial lures, and flies. Numerous access locations are provided along the stream corridor. Trout numbers are strong compared to most area waters and the potential for large wild fish exists.

Current regulation: Between Park Street and South Valley Road (Catch and release all trout, artificial lures only) remaining water 3 fish bag, 9" size limit.

Brown Trout:	6/27/2007	7/25-8/5/2008
Total Captured:	209	924
Average Length (in):	8.16	9.64
Length Range (in):	2-18.9	2.8-20.5
%Legal (>9"):	37	53
Catch per effort (>9"):	274 / mile	241 / mile
Catch per effort (ALL):	736 / mile	452 / mile



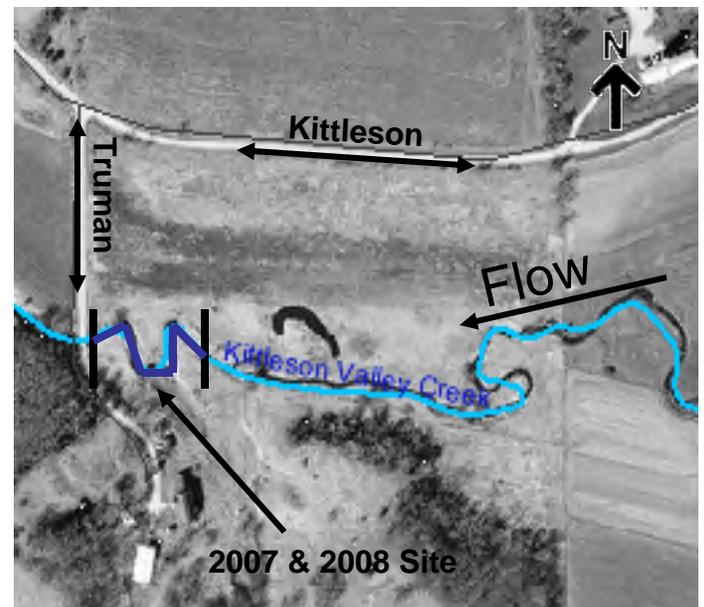
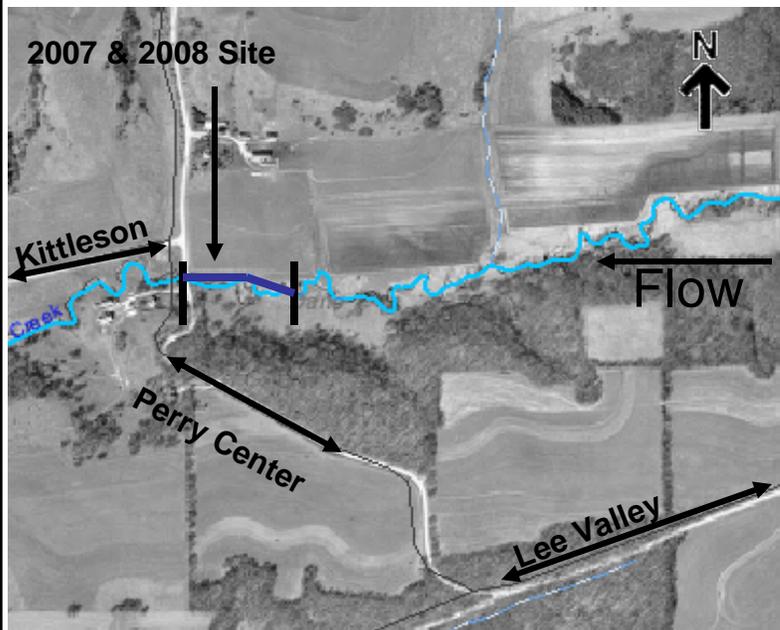
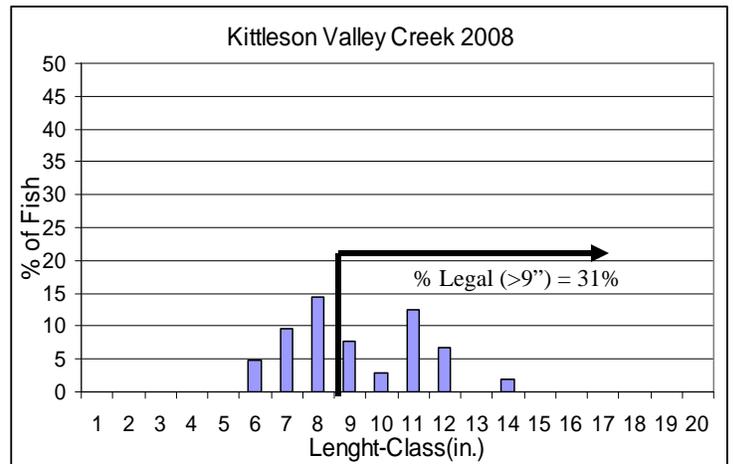
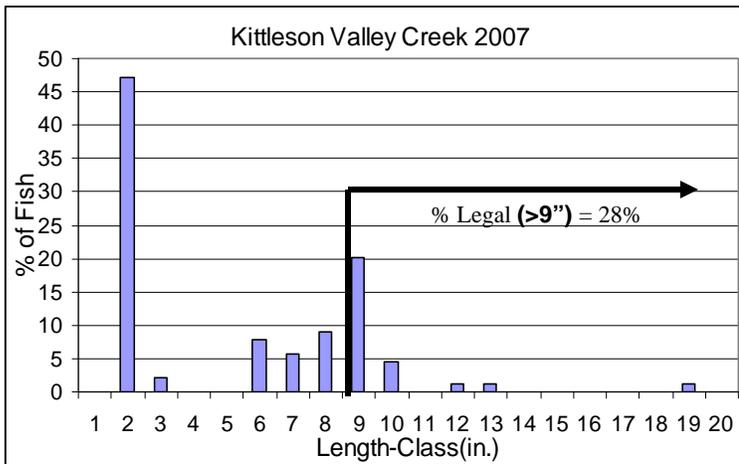
Kittleson Valley Creek

Stream Summary: Kittleson Valley Creek (KVC)

KVC is a third order stream located in the SW corner of Dane county. It is a tributary to Gordon Cr (Iowa County). Water quality is good and the stream is of sufficient size and gradient to offer deeper pools and well developed riffle-runs. Adjacent land use is agricultural. KVC received extensive bank and in-stream habitat work in 2007 and 2008. Nuisance bank vegetation has been removed and eroding banks sloped and stabilized. LUNKER structures, cross log revetments and boulder retards provide fish holding cover. Public easement has been added and is clearly signed. **Current regulation: 3 fish bag, 9" size limit.**



Brown Trout:	6/27/2007	7/16/2008
Total Captured:	89	104
Average Length (in):	5.8	9.6
Length Range (in):	2-19.8	6.4-14.9
%Legal (>9"):	28	32
Catch Per Effort (>9"):	137 / mile	212 / mile
Catch Per Effort (All):	489 / mile	689 / mile



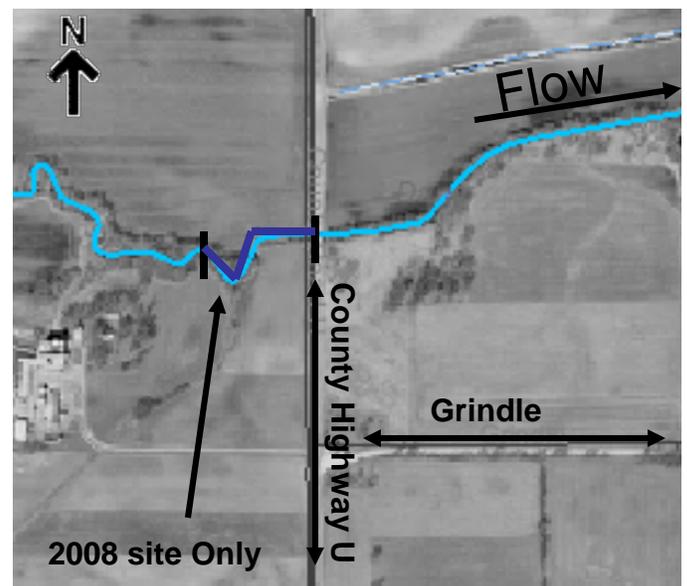
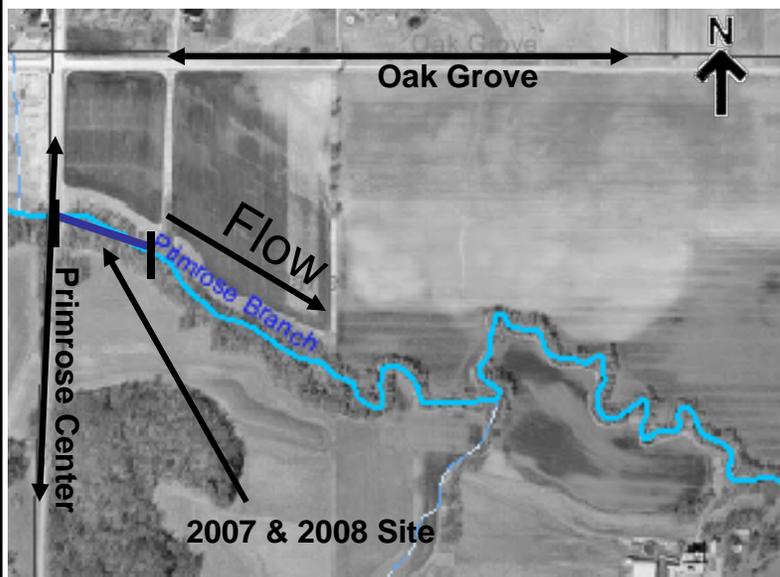
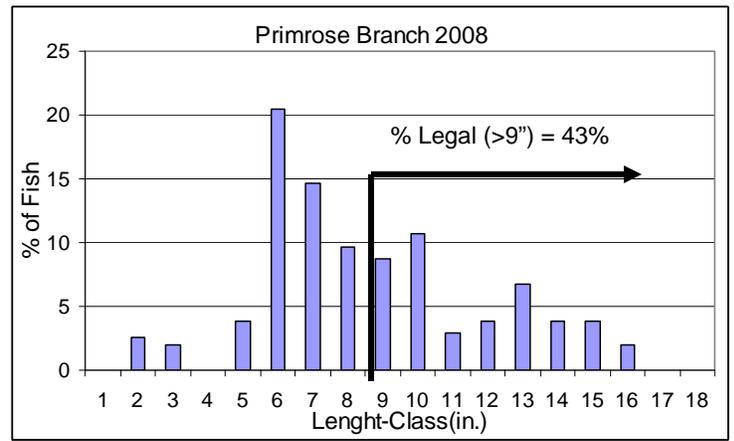
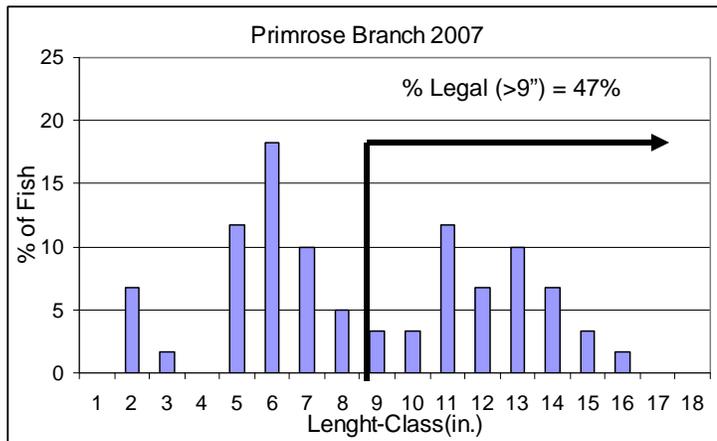
Primrose Branch

Stream Summary: Primrose Branch

This tributary to the West Branch Sugar River (WSBR) is another of Dane County's true driftless region creeks. Fed by abundant springs, the Primrose offers opportunities for brook trout as well as holding browns in its lower reaches. The Primrose is small and shallow and has experienced channel straightening below CTH U in the past. It received intensive bank work on the lower 1.9 miles in 2004 as well the addition of in-stream cover features. As a small stream, it too 'grasses over' by mid-June making fishing more difficult. Public easement 1 rod in width (16 feet) is provided along both banks from Primrose Center Road downstream.

Current regulation: 3 fish bag, 9" size limit

Brown Trout:	7/26/2004	6/19/2007	6/4/2008
Total Captured:	68	60	103
Average Length (in):	6.7	9.2	9.1
Length Range (in):	2.8-12	2.3-16.7	2.4-16.3
%Legal (>9"):	9	47	43
Catch per effort (>9"):	15 /mile	187 /mile	95 /mile
Catch per effort (All):	162 /mile	401 /mile	222 /mile



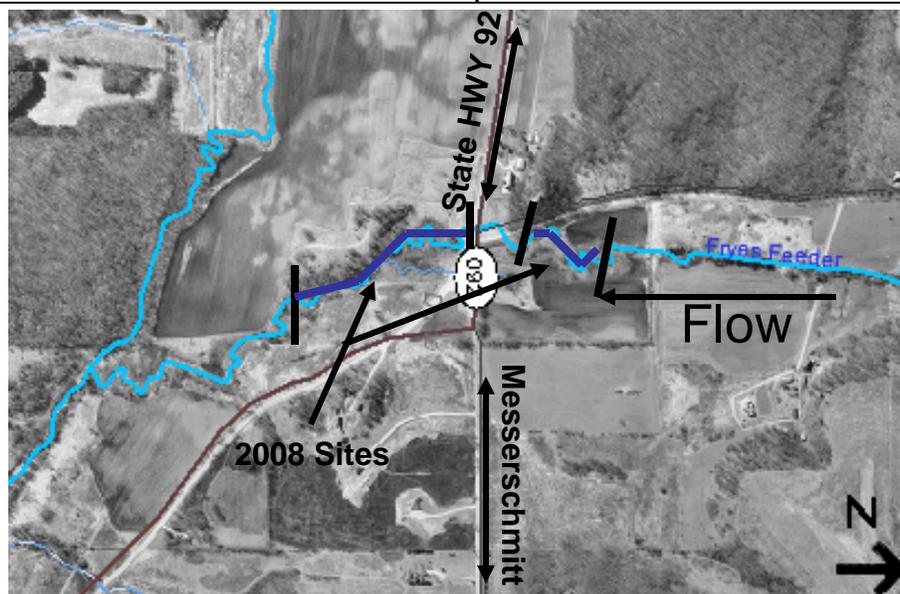
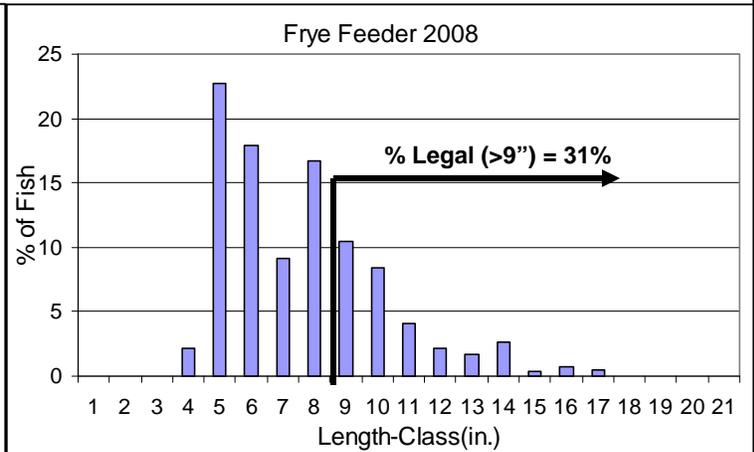
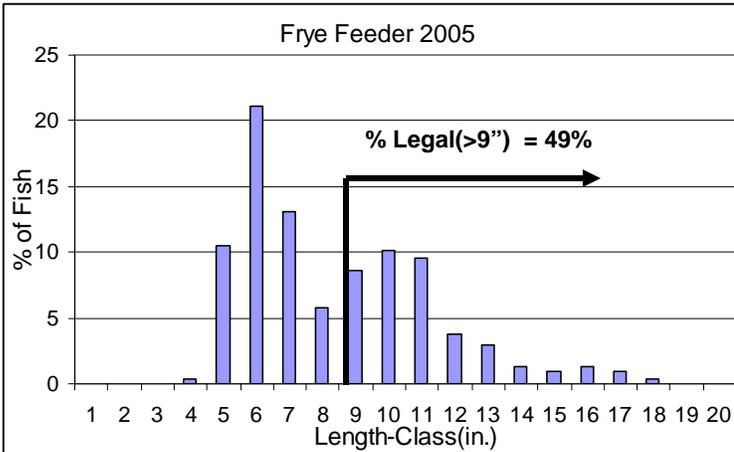
Frye Feeder

Stream Summary: Frye Feeder

One of the 2 tributaries that form Mount Vernon Creek, Fryes feeder originates in the agricultural and wooded landscapes of Springdale Township southeast of Mt. Horeb. This is a classic spring tributary, characterized by a narrow channel with overhanging vegetation, cold water, rocky substrates, and higher gradient. It meanders frequently with deep water found only in the numerous bends. This small system holds good numbers of trout and serves nursery feeder to the Mt. Vernon main stem. Stream reaches immediately above and below STH 92 had rehabilitation work in the late 1990's. Access is provided via Donald Park.

Current regulation: 3 fish bag, 9" size limit

Brown Trout:	7/7&14/2004	6/8&29/2005	6/4/2008
Total Captured:	313	313	419
Average Length (in):	7.9	9.3	8.1
Length Range (in):	2.2-16.4	4.7-18.4	4.2-17.3
%Legal (>9"):	36	49	31
Catch per effort (>9"):	137 / mile	178 / mile	217 / mile
Catch per effort (All):	382 / mile	361 / mile	699 / mile



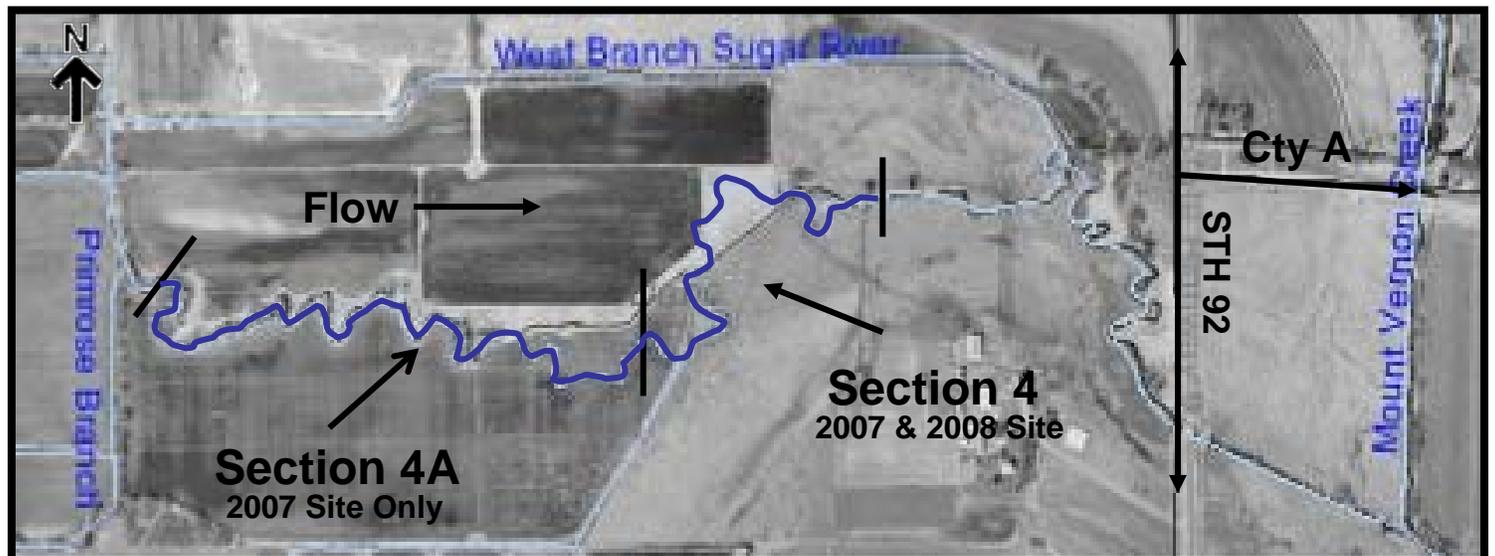
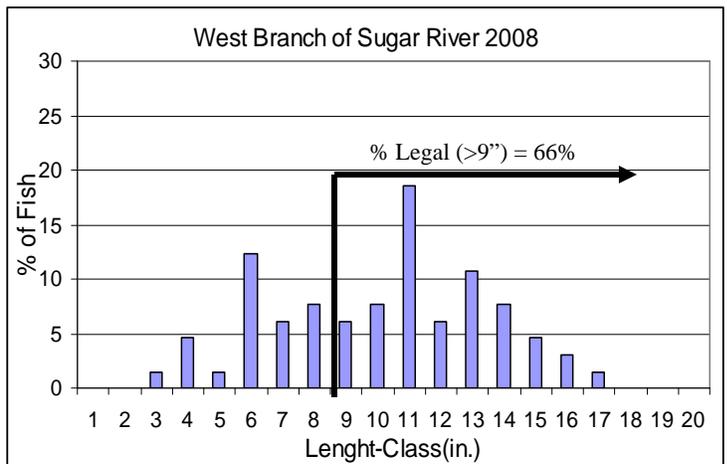
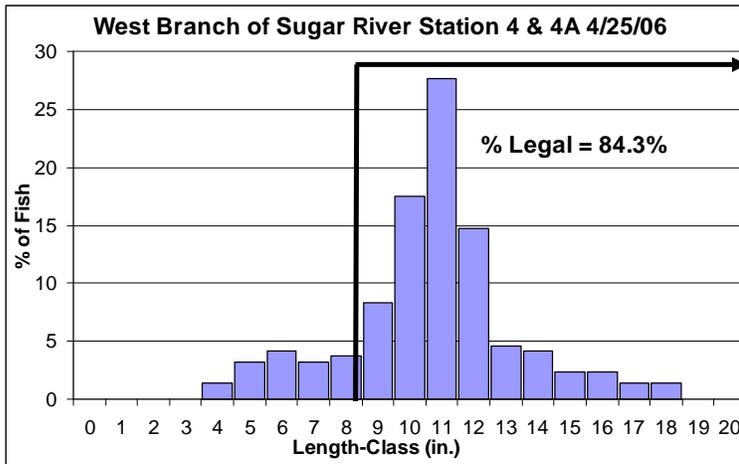
West Branch of Sugar River

Stream Summary: West Branch of Sugar River

The WBSR is a Class II trout stream and has been the focus of intensive habitat rehabilitation 2000-2002. The annual stocking quota for this stream consists of both large and small fingerling wild strain brown trout. Thirteen miles from STH 92 upstream to Lewis Road received removal of nuisance trees, channel narrowing, and placement of LUNKER structures. The stream has excellent habitat for all life stages of trout. The WBSR experienced a severe fish kill in February 2005. Current trout numbers are fair to good and recovering. Large fish are well represented. This meadow stream is large enough for easy fly casting and spin fishing opportunities.

Current regulation: 3 fish bag, 9" size limit.

Brown Trout:	7/29/2004	4/25/2006	8/5/2008
Total Captured:	83	217	65
Average Length (in):	9.8	11.1	10.5
Length Range (in):	5.5-18.1	4.9 – 18.2	3.2-17.5
% Legal (>9"):	48.8	84.3	66
Catch per effort (>9"):	62 / mile	300 / mile	112 / mile
Catch per effort (All):	136 / mile	355 / mile	170 / mile



Stocking History West Branch Sugar River

Year	Species	Number of fish stocked	Avg. length of fish (in.)
2003	BROWN TROUT	4,358	3.2
2003	BROWN TROUT	1,000	9.0
2003	BROWN TROUT	225	5.5
2004	RAINBOW TROUT	50	21.0
2004	BROWN TROUT	180	14.4
2004	BROWN TROUT	2,000	1.9
2004	RAINBOW TROUT	500	10.3
2004	BROWN TROUT	840	5.9
2005	BROWN TROUT	3,000	2.4
2005	RAINBOW TROUT	514	9.8
2006	RAINBOW TROUT	9	12.0
2006	RAINBOW TROUT	34	18.0
2006	RAINBOW TROUT	500	9.0
2006	BROWN TROUT	500	10.0
2007	RAINBOW TROUT	1,000	9.0
2007	BROWN TROUT	1,500	4.0
2008	RAINBOW TROUT	500	10.0
2008	BROWN TROUT	2,000	2.0

Stocking Strategy:

We stock fish to augment the naturally occurring low density, thus build trout biomass and numbers by providing wild origin fish that will self reproduce.

- All fish stocked are marked.
- All trout are of wild origin.
- Some were added to offset losses after winter 2005 fish kill.

Habitat Evaluation:

2002 at CTH JG
Score = 65 (Good)

Coldwater IBI:

2005 upstream of US hwy 92
Avg. Score = 33 (Fair)

Coldwater IBI:

2008 upstream of US hwy 92
Avg. Score = 37 (Fair)

Hilsenhoff Biotic Index (HBI)

2002 at CTH JG
Score = 3.154 (Excellent)

Habitat rehabilitation activities.....

- West Branch of the Sugar River was listed as impaired water due to sedimentation and habitat condition (eroding banks, excessive shading, etc)
- Received over \$900,000 in Targeted Runoff Management (TRM) grants from 2000 – 2002
- Removed from the federal list of degraded waters in 2004
- Resulted in twenty year public fishing easements along miles of stream

