



# **2007 Steelhead Redd Surveys Naches River Tributaries**

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**Lead Agencies**

# Survey Method/Purpose

- **Fourth year of monitoring steelhead spawning in the Naches River Basin. In 2007, surveys were focused in the Little Naches River drainage, Nile Creek, and Oak Creek. These reaches had favorable water flows and clarity during the spawning period**
  - **Attempt to establish a long term data set of key spawning reaches and document any expansions in the steelhead spawning distribution**
  - **Multiple pass surveys in tributaries of the Naches River, and GPS redd locations**
  - **In 2007 two to four surveys were accomplished per reach between April 24 - May 30**
  - **High stream flows and limited personnel prevented surveys on Bumping and American Rivers and Rattlesnake Creek**
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- An underwater photograph of two steelhead trout swimming in a stream. The fish are positioned horizontally, with the larger one in the foreground and a smaller one slightly behind it. They have silvery bodies with dark spots and a reddish-pink hue on their heads. The background shows a rocky stream bed with some green algae or moss.



# Redd Survey Reaches 2007

**Mainstem Little Naches River – Mouth to Quartz Creek,  
Longmire Meadow to Pileup Creek & FourWay Meadow to  
North/Middle Forks confluence (10.9 miles)**

**North Fork L. Naches – mouth to RM 2.7**

**Quartz Creek – mouth to trail crossing @ RM 1.5**

**Bear Creek – mouth to RM 1.6**

**WF Bear Creek – mouth to RM 1.4**

**Blowout Creek – mouth to RM 1.3**

**Nile Creek – Nile Road to Orr Creek (6.0 miles)**

**Oak Creek – Mouth to Indian Creek (5.0 miles)**



# Oak Creek

The image shows three vibrant purple flowers with prominent white stamens and green, lobed leaves. They are growing in a natural, wooded environment with a ground covered in dry twigs and pine needles. The text is overlaid in a bright green color.

4/24, 5/1, 5/8 and 5/17 Surveys  
Mouth to Indian Creek – 15 Redds  
New redds observed on each survey



# Oak Creek

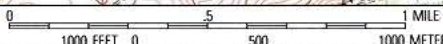
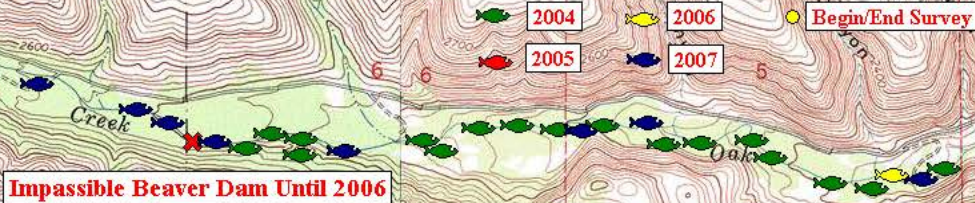
A photograph of three steelhead trout spawning on a rocky riverbed. The fish are positioned horizontally across the frame, with the largest one in the foreground and two smaller ones behind it. They are surrounded by a variety of smooth, rounded rocks in shades of brown, grey, and tan. The water is shallow and clear, reflecting the light. The overall scene is a natural, outdoor setting.

**Steelhead spawning penetrated nearly one mile upstream of a former impassible beaver dam that washed out in 2006**



# Oak Creek

## Oak Creek Steelhead Redds







# Nile Creek

No private land survey access to  
lower 0.5 mile of stream in 2007





## Nile Creek

4/27, 5/8, 5/17 surveys

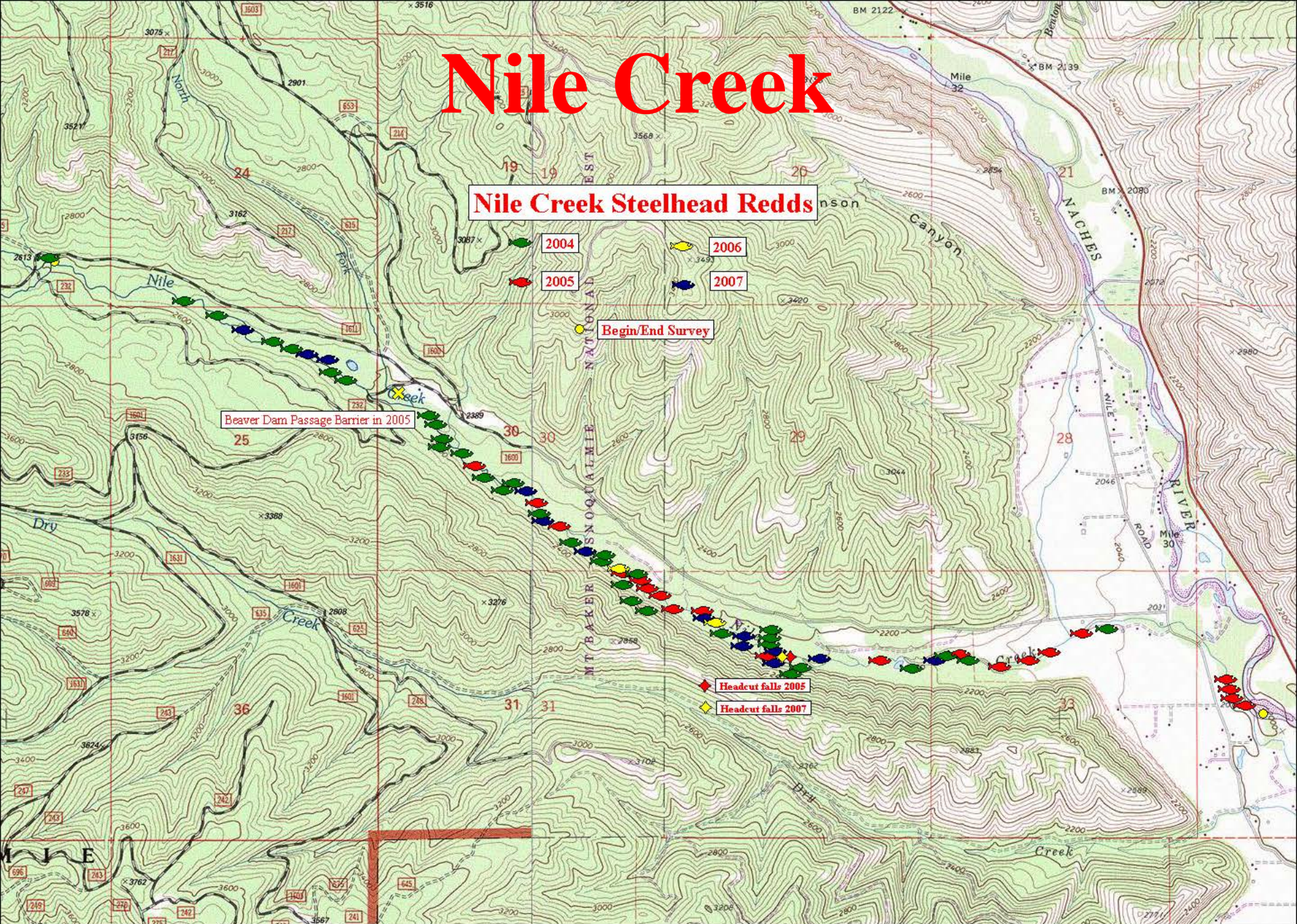
Nile Road to Orr Creek – 13 redds

New redds observed on each survey pass



# Nile Creek

## Nile Creek Steelhead Redds



2004

2006

2005

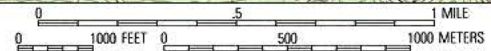
2007

Begin/End Survey

Beaver Dam Passage Barrier in 2005

Headcut falls 2005

Headcut falls 2007





A photograph of a river with large logs in the foreground and a dense forest in the background. The river is dark and calm, with several large, weathered logs floating in it. The logs are light brown and have some orange and black markings. The background is a dense forest of tall, green evergreen trees. The sky is blue and clear.

# Little Naches River and Tributaries

Surveyed between May 3 and May 30

Redds observed between May 15 and  
May 30th

16 total redds in drainage





# Little Naches

Redds located between 2800' and 3375' elevation  
Highest elevation redds located in the North  
Fork Little Naches River





# Little Naches

## Spawning found in three reaches:

- Quartz Creek (2 redds, 1.5 miles)
- North Fork Little Naches, mouth to 0.5 miles above Pyramid Creek (6 redds, 2.7 miles)
- Little Naches River, Four Way Meadow to Mid/Nth Fork (8 redds, 4.7 miles)



Spawning Survey Reach Segments

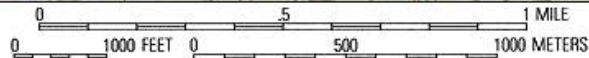
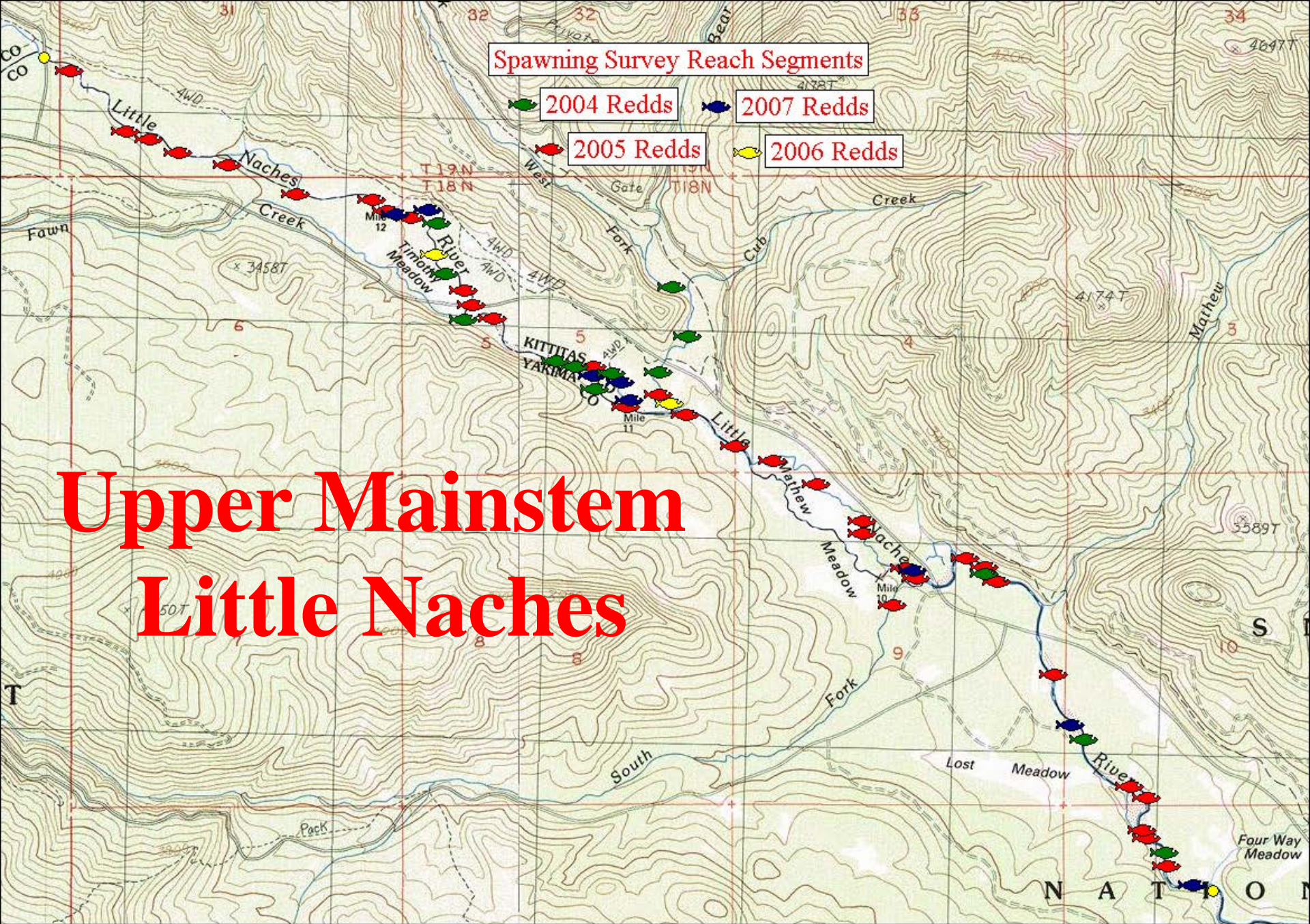
2004 Redds

2007 Redds

2005 Redds

2006 Redds

# Upper Mainstem Little Naches

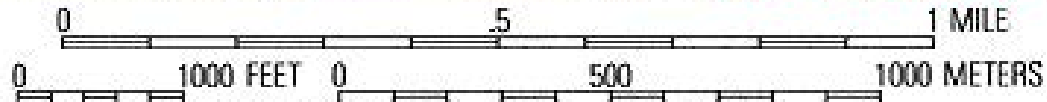




# North Fork Little Naches River

End of Redd Surveys

-  2005 Redds
-  2006 Redds
-  2007 Redds





# Rattlesnake Creek

No surveys in 2007 due to limited opportunities of safe and favorable surveying conditions and limited personnel availability







# American River

No surveys in 2007 due to high flow conditions during entire month of May





# **Bumping River**

**No surveys in 2007 due to spring snow melt in March with filled Bumping Reservoir early, causing high water to be passed during April and May**



<b>Stream</b>	<b>Reach</b>	<b>Miles</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
L. Naches River	Mouth to Quartz Creek	3.6	6	14	N/S	0
L. Naches River	Salmon Falls to Pileup Creek	2.6	4	6	2	0
L. Naches River	Four-Way Meadow Creek to North/Middle Fork L. Naches ccnfluence	4.7	10	31	1	8
Bear Creek	Mouth to W. 4 <sup>th</sup> bridge/culvert, and W.Fork Bear to RM 1.3	3.0	3	1	1	0
Quartz Creek	Mouth to RM trib at RM 3.3	3.3	4	3	0	2
Blowout Creek	Mouth to ½ mile above 1913 road.	1.3	N/S	0	N/S	0
North. Fork Little Naches River	Mouth to ¼ mile above Pyramid Creek.	2.7	N/S	13	0	6
South. Fork Little Naches River	Mouth to trib @ RM 1.9	1.9	N/S	1	N/S	N/S
Middle Fork Little Naches River	Mouth to falls @ RM 2.6	2.6	N/S	1	N/S	N/S
<b>Totals L. Naches</b>			<b>27</b>	<b>70</b>	<b>4</b>	<b>16</b>
<b>Nile Creek</b>	<b>Mouth to 1611 road culvert above Orr Creek</b>	<b>6.0</b>	<b>33</b>	<b>20</b>	<b>2</b>	<b>13</b>
<b>Oak Creek</b>	<b>Mouth to Beaver Dam (04-05), to Indian Creek (06-present)</b>	<b>5.0</b>	<b>18</b>	<b>2</b>	<b>1</b>	<b>15</b>



# Summary Comparison 2004-2007 Surveys

## Naches Steelhead Redds:

94 in 2004	140 in 2005
19 in 2006	44 in 2007

## Miles Surveyed:

39.5 in 2004	91.4 in 2005
61.4 in 2006	30.4 in 2007

## Prosser Adult Steelhead Passage:

2755 in 2004	3451 in 2005
2005 in 2006	1342 in 2007



# Acknowledgements

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