TROPHY RANCHES & TROPHY TROUT

Appraisal Institute Annual Meeting
Denver, Colorado
July 23, 2019
Trophy Ranches & Trophy Trout: Using GIS Modeling to Determine the Value of High Amenity Western Ranches

Introduction

■ Topics

- What is a “trophy ranch”?
- Growth in popularity of trout fishing in the USA
- Criteria for designation of “gold medal” & “blue ribbon” trout streams
- Traditional appraisal methods for determining the contribution of western river frontage to ranch values
- Can GIS modeling be used to determine the contribution of trout fishing quality to land prices & values?
Trophy Ranches & Trophy Trout: Using GIS Modeling to Determine the Value of High Amenity Western Ranches

Introduction

Panelists

- Richard J. Roddewig – Managing Director, JLL Valuation & Advisory Services LLC – Chicago
- Peter Dittmar – Granite Creek Valuation – Jackson, Wyoming
- Benjamin Tolles – Analyst, JLL Valuation & Advisory Services LLC – Chicago
TROPHY RANCHES: WHAT ARE THEY?

Richard J. Roddewig, JD, MAI, CRE
Managing Director
JLL Valuation & Advisory Services LLC
Chicago, Illinois
richard.roddewig@am.jll.com
TROPHY RANCHES: WHAT ARE THEY?

- Development of a “trophy ranch” submarket in the past 30 years
  - First emergence in the 1980s – near ski areas
    - Sundance in Utah
    - Jackson Hole, Wyoming
    - Roaring Fork Valley (Aspen), Colorado
TROPHY RANCHES: WHAT ARE THEY?

■ Second wave of “trophy ranch” acquisitions
  - Late 1980s and early-1990s – in response to the “romance of the west”
  ■ “A River Runs Through It”
  ■ Ted Turner acquisitions Nebraska, Montana & New Mexico
  ■ Conservation (& trout fishing) become important
TROPHY RANCHES: WHAT ARE THEY?

■ Ted Turner Acquisitions – 1,426,000 Acres

![Turner Ranches Map]
TROPHY RANCHES: WHAT ARE THEY?

“Trophy Ranches” become a separate submarket (market segment) defined by their “uniqueness”:

- Size
- Scenic character
- Environmental quality
- Prices & values unrelated to the economics of ranching
- Type of buyer – Wall Street, Hollywood & media personalities, tech entrepreneurs
TROPHY RANCHES: WHAT ARE THEY?

■ “Trophy Property” -- the appraisal profession definitions:
  – Appraisal Journal, October 2002 Article
■ “A trophy property is an investment grade property represented by value or price at the top 2.5 percentile of properties in its particular land use category and is distinguished by special high-quality attributes that will attract the financial resources, in cash, to purchase it.”
TROPHY RANCHES: WHAT ARE THEY?

- “Trophy Property” -- the appraisal profession definitions:
  - Appraisal Journal, October 2002 Article

“. . . the property must be unique. Uniqueness often can distinguish a property and increase demand. Uniqueness is a supply side variable. It suggests a one-of-a-kind property. Consequently, uniqueness suggests a limited supply. For example, there is only one Rockefeller Center and there are a limited number of ranches with world class rainbow trout fishing in the United States. Therefore, supply is limited. Demand is substantial. The issue is price.”
TROPHY RANCHES: WHAT ARE THEY?

■ “Trophy Ranch” -- the appraisal profession definitions:
  - Appraisal Journal, January 2003 Article

Wrapped up in the booming preservation and conservation property market is a finite supply of western ranches that still capture the imagination, representing a lifestyle that is rapidly becoming an anachronism. Marketing materials that advertise the offering for sale of a “trophy” ranch, or promote a family vacation at a dude ranch play off the theme of John Wayne on a horse, punching cattle with a beautiful mountain scene in the background.
TROPHY RANCHES: WHAT ARE THEY?

■ “Trophy Ranch” -- the appraisal profession definitions:
  - Appraisal Journal, January 2003 Article

“Consistently important” trophy ranch characteristics are:

- Privacy
- Exclusivity
- Natural beauty
- Recreational opportunities (hunting, fishing, skiing, hiking)
- Scarce resources (archaeology)
- Biodiversity
- High quality improvements
- Urban service proximity (medical retail conveniences, entertainment)
- Adjacent public lands
“Trophy Ranch” -- the appraisal profession definitions:
- Appraisal Journal, January 2003 Article

These very unique properties create a substantial valuation problem for real estate appraisers. Because of the uniqueness of the property, data is limited. The markets for them are seldom local; rather they are national, even international, in scope. For example, a popular place for United States citizens to buy trophy ranch property is in the Patagonia region of Argentina. Sellers and buyers rely on national marketing sources such as the Wall Street Journal, Sotheby’s International, Rocky Mountain Farm and Ranch, and Estates West: The Magazine of Luxurious Living, as well as national and international real estate brokerage firms. The market for data is likewise national in scope, rather than local.
TROPHY RANCHES: WHAT ARE THEY?

■ U.S. Forest Service & G.A.O definitions:
  - General Accounting Office Report on the Baca Ranch, New Mexico, Acquisition, March 2000
TROPHY RANCHES: WHAT ARE THEY?

- U.S. Forest Service & G.A.O definitions:

The Valles Caldera in northern New Mexico, also known as the Baca Ranch, is one of a kind. It's the world's largest extinct volcano and a geologic wonderland of peaks, valleys and hot springs. One of the West's largest elk herds lives there, and the area contains Native American religious and cultural sites.

It's also for sale. If the federal government doesn't act quickly, the 95,000-acre ranch could fall into the hands of developers.

In the past, New Mexico Democratic Sen. Jeff Bingaman pushed Congress to buy the land, but without the support of New Mexico Republican Sen. Pete Domenici, his efforts failed (HCN, 8/3/98: Congress drags its feet on Baca Ranch deal).

The senators are now co-sponsoring a bill that authorizes the federal government to buy the crater. While many conservationists are ready to breathe a sigh of relief, others are troubled by the deals made to gain Domenici's support.
TROPHY RANCHES: WHAT ARE THEY?

- U.S. Forest Service & G.A.O definitions from Baca Ranch acquisition controversy:
TROPHY RANCHES: WHAT ARE THEY?

- U.S. Forest Service & G.A.O definitions:
  - General Accounting Office Report on the Baca Ranch, New Mexico, Acquisition, March 2000

The Baca Ranch’s Uniqueness Was Cited as a Key Factor in Assigning It a Premium Value

The key factor that was cited by the appraisers as influencing their ultimate assessment of the property’s premium value—and by the Service’s chief appraiser as influencing his decision to accept it—was the Baca Ranch’s uniqueness. Specifically, the owner’s appraisal said that the Baca Ranch is a unique property—due to characteristics such as its location, size, scenery, and pristine appearance—and that purchasers of such “trophy ranches” as the Baca Ranch are willing to pay premium prices for uniqueness. Furthermore, the appraisal asserted that properties such as the Baca Ranch that range in size from 10,000 to 100,000 acres do not follow the usual size-price relationship in land—which says that as the amount of acreage increases, the price per acre decreases. As a result, the owner’s appraisers believe that the Baca Ranch’s size does not matter as much as its location, usage, and other physical characteristics do and that the property should bring a premium price because of these other factors. According to the owner’s appraisal, no properties are truly comparable to the Baca Ranch; therefore, the appraisers applied professional judgment and used qualitative analysis to eliminate most of the larger and low-valued comparable properties. They instead relied on two smaller comparable properties to compute the appraised value, asserting that the two properties are most like the Baca Ranch in terms of their location and diversity of use. The appraisal then used the per-acre prices of these two
TROUT FISHING’S GROWING APPEAL & POPULARITY

Richard J. Roddewig, JD, MAI, CRE
Managing Director
JLL Valuation & Advisory Services LLC
Chicago, Illinois
richard.roddewig@am.jll.com
TROUT FISHING’S GROWING APPEAL & POPULARITY

Fly fishing participation continued to grow in 2017. The sport increased from 6.5 million participants in 2016 to a record 6.8 million in 2017.

Americans spent 75.1 million days fly fishing in 2017. In 2016, they fly fished a total of 77.1 million days.

The average number of fly fishing outings per person dropped from 11.9 days in 2016 to 11.1 days in 2017.
TROUT FISHING’S GROWING APPEAL & POPULARITY
1st Time Fishing Participants
among freshwater fishing participants, ages 6+
5.6% of freshwater fishing participants, or 2.2 million people, were new to the activity in 2017. This is a slight increase from 2016.

14.7% of fly fishing participants, or 1.0 million people, were new to the activity in 2017.
TROUT FISHING’S GROWING APPEAL & POPULARITY

FLY FISHING
TROUT FISHING’S GROWING APPEAL & POPULARITY

Fly Fishing Targets Women as a Source for Growth

They are the fastest growing demographic in fly fishing but have to find proper gear, navigate social media and plan self-defense in the outdoors.
TROUT FISHING’S GROWING APPEAL & POPULARITY

The Philosophy of Fly-Fishing

By John Knight  October 10, 2017
“It was an early fall day and I had the world to myself. The sun slanted through the trees and the water was still warm from summer. I watched dragonflies cruise over the surface and a bald eagle fly overhead. I sat a time on the bank and tried to see the bugs floating above the current or resting in the grass; I turned over a few rocks and looked for bright green larvae sequestered in their husks. I walked up and down the river, tried caddis flies and nymphs and flying ants. I floated lures on the top of the water and sank beaded hooks into pools. I saw a fish jump and threw my line to just the same place. I picked apart a tangled line and watched the bugs and birds fly. I was quiet and contemplative. And I didn’t catch a single fish.”
FISHING RESOURCES & WESTERN LAND VALUES

Peter Dittmar
Granite Creek Valuation
Jackson, Wyoming
pete@granitecreekvaluation.com
FISHING RESOURCES AND WESTERN LAND VALUES
FISHING RESOURCES AND WESTERN LAND VALUES

- Land in Jackson Hole, Wyoming
  - Values influenced by:
    - Acreage
    - View (Grand Teton)
    - Fishing/ River Influence (Snake River)
“Recreational” Ranches in Western WY

- *Values influenced by:*
  - Acreage
  - Ag production
  - Fishing/ river influence
  - Mountain views
  - Hunting/ public land
  - Other
FISHING RESOURCES AND WESTERN LAND VALUES

- How to rank trout stream productivity?
  - Public Productivity Data (i.e. WYGF Stream Ranking)
  - Flows (annual, peak, low)
  - Streambed (meanders, holding areas or pools)
  - Local knowledge
    - Brokers specializing in recreational properties
    - Fly shops
    - Guides
    - On the ground G&F staff
    - Others (Trout Unlimited board/staff, local consultants)
Wyoming Game & Fish Stream Classification

- Ranking system is based on pounds of trout/mile
  - BLUE = > 600 pounds/mile
  - RED = 300 to 600 pounds/mile
  - YELLOW = 50 to 300 pounds/mile
  - GREEN = < 50 pounds/mile
FISHING RESOURCES AND WESTERN LAND VALUES

- WYGF Stream Map
FISHING RESOURCES AND WESTERN LAND VALUES

- Colorado Parks & Wildlife Classification
  - Ranking system is only one level – Gold Medal
  - Based on “quality trout,” “standing stock,” and “public access”
    - Quality trout = a minimum of 12 ”quality trout” of 14+ inches per acre
    - Standing stock = 60 pounds per acre (fish, plant life, micro invertebrates)
FISHING RESOURCES AND WESTERN LAND VALUES

- CPW Stream Map
FISHING RESOURCES AND WESTERN LAND VALUES

- Private land and public river access
  - Wyoming & Colorado: Streambed owned by LO; public may not wade/anchor
  - Montana: Streambed owned by LO (generally), but public may recreate between high water marks
  - Idaho: State owns to the high water mark, thus public may recreate between high water marks
FISHING RESOURCES AND WESTERN LAND VALUES

- Valuation Analysis of River Properties
  - *What’s the best unit of comparison?*
    - Overall sale price?
    - Price per acre?
    - Price per river mile?
    - Other?
FISHING RESOURCES AND WESTERN LAND VALUES

- Valuation Analysis of River Properties
  - *How to extract the fishing resource contribution?*
    - What we did: allocation of land values based on land classification
    - Example
FISHING RESOURCES AND WESTERN LAND VALUES

- Valuation Analysis of River Properties

A 10,000 deeded acre ranch sells for $20,000,000. Ranch includes 5 river miles on a ”Blue Ribbon” river in the West. Also includes a nice custom residence, ranch manager home, and other agricultural buildings.

Land Allocation

- 3,500 acres irrigated meadow @ $2,500/ac = $8,750,000
- 2,000 acres sub/irrigated pasture @ $1,250/ac = $2,500,000
- 4,000 acres rangeland @ $625/ac = $3,200,000

Improvements contributed $1.25M

Subtotal = $15,000,000

$5,000,000 allocated to river contribution, or $1M per mile
USING GIS MODELING TO DETERMINE RIVER & FISHING VALUES

Ben Tolles
Analyst
JLL Valuation & Advisory Services LLC
Chicago, Illinois
ben.tolles@am.jll.com
GIS MAPPING BASICS

- Data Availability
  - ArcGIS Online
  - GAP National Terrestrial Ecosystems - USGS
  - County Websites
  - Wyoming Game and Fish Department
  - Local Appraiser

- Data Used
  - Parcel Shapefiles
  - Stream Lines
  - GAP Land Cover Raster Layers

- Programs
  - ArcGIS, QGIS

Wyoming Game & Fish Stream Classification
- **BLUE** = > 600 pounds/mile
- **RED** = 300 to 600 pounds/mile
- **YELLOW** = 50 to 300 pounds/mile
- **GREEN** = < 50 pounds/mile
Confirm Sales with County Property Records

Detail of R0003982

Parcel

PIDN:
Tax ID: Property Taxes
Tax District: 0101

Property Owner(s): RANCH EAST
Mailing Address:
FORT COLLINS, CO 80521-2680
Street Address:

Deed: 2016, 05/31/2016

Location: 14 N 72 W 14 W2 LESS SESW 280.000, NE LESS TR IN NENE 122.80, NWSE 40.00-
Sale 1: Dale Creek – Laramie, WY

Total Acres: 2,688
Price: $3,000,000

Green Stream
Classifying Land Types

<table>
<thead>
<tr>
<th>Land Cover Types</th>
<th>Pixels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Water</td>
<td>57</td>
</tr>
<tr>
<td>Evergreen Forest</td>
<td>1,717</td>
</tr>
<tr>
<td>Shrub/Scrub</td>
<td>17,578</td>
</tr>
<tr>
<td>Herbaceous</td>
<td>2,867</td>
</tr>
<tr>
<td>Woody Wetlands</td>
<td>112</td>
</tr>
<tr>
<td>Emergency Herbaceous Wetlands</td>
<td>505</td>
</tr>
<tr>
<td></td>
<td>22,836</td>
</tr>
</tbody>
</table>
Determining Stream Lengths

Green Stream

4.83 Miles Dale Creek (Green)

Reprojection

GCS_WGS_1984 → NAD_1983_StatePlane_Wyoming_East_FIPS_4901_Feet
Reclassifying Land Types

Total Acres: 2,688

<table>
<thead>
<tr>
<th>Land Classifications</th>
<th>Pixels</th>
<th>% of Total</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mountain/Timber</td>
<td>1,717</td>
<td>7.5%</td>
<td>202</td>
</tr>
<tr>
<td>Irrigate Meadow</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
</tr>
<tr>
<td>Upland Grass/Sage</td>
<td>20,445</td>
<td>89.5%</td>
<td>2,407</td>
</tr>
<tr>
<td>Subirr &amp; Pasture</td>
<td>617</td>
<td>2.7%</td>
<td>73</td>
</tr>
<tr>
<td>Other</td>
<td>57</td>
<td>0.2%</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>22,836</strong></td>
<td><strong>1</strong></td>
<td><strong>2,688</strong></td>
</tr>
</tbody>
</table>
## Value of JUST Land

**Total Acres:** 2,688

<table>
<thead>
<tr>
<th>Land Classifications</th>
<th>Acres</th>
<th>Average $/ac</th>
<th>Contributory Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mountain/Timber</td>
<td>202</td>
<td>$2,169</td>
<td>$438,297</td>
</tr>
<tr>
<td>Irrigate Meadow</td>
<td>0</td>
<td>$2,329</td>
<td>$0</td>
</tr>
<tr>
<td>Upland Grass/Sage</td>
<td>2,407</td>
<td>$731</td>
<td>$1,760,197</td>
</tr>
<tr>
<td>Subirr &amp; Pasture</td>
<td>73</td>
<td>$1,295</td>
<td>$94,015</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Total Land Value</strong></td>
<td></td>
<td></td>
<td><strong>$2,292,509</strong></td>
</tr>
</tbody>
</table>

From Local Appraiser
Value of River Access/Fishing Resources

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sale Size (Ac.)</td>
<td>2,688</td>
</tr>
<tr>
<td>Total Sale Price</td>
<td>$3,000,000</td>
</tr>
<tr>
<td>Contribution of Land</td>
<td>$2,292,509</td>
</tr>
<tr>
<td>Government Lease</td>
<td>$0</td>
</tr>
<tr>
<td>Improvements</td>
<td>$0</td>
</tr>
<tr>
<td>Remainder</td>
<td>$707,491</td>
</tr>
<tr>
<td>Contribution of River to Value</td>
<td>23.6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>River Miles</th>
<th>4.83</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price/Mi</td>
<td>$146,478</td>
</tr>
</tbody>
</table>

Wyoming Game & Fish Stream Classification

- **BLUE** = > 600 pounds/mile
- **RED** = 300 to 600 pounds/mile
- **YELLOW** = 50 to 300 pounds/mile
- **GREEN** = < 50 pounds/mile
Sale 2: Little Laramie River – Laramie, WY

2.84 Miles of Little Laramie River (Red)
Price: $6,425,000
## Land Types & Value

Total Acres: 3,654

<table>
<thead>
<tr>
<th>Land Classification</th>
<th>Pixels</th>
<th>% of Total</th>
<th>Acres</th>
<th>Average $/Ac</th>
<th>Contributory Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mountain/Timber</td>
<td>51</td>
<td>0.3%</td>
<td>11</td>
<td>$2,169</td>
<td>$24,765</td>
</tr>
<tr>
<td>Irrigate Meadow</td>
<td>647</td>
<td>4.0%</td>
<td>145</td>
<td>$2,329</td>
<td>$337,427</td>
</tr>
<tr>
<td>Upland Grass/Sage</td>
<td>12,209</td>
<td>74.8%</td>
<td>2,734</td>
<td>$731</td>
<td>$1,999,493</td>
</tr>
<tr>
<td>Subirr &amp; Pasture</td>
<td>3,140</td>
<td>19.2%</td>
<td>703</td>
<td>$1,295</td>
<td>$910,137</td>
</tr>
<tr>
<td>Other</td>
<td>272</td>
<td>1.7%</td>
<td>61</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>
| **Total**               | 16,319 | **3,654**  | **Total Land Value** | **$3,271,822**}
## Value of River Access/Fishing Resources

**Total Acres:** 3,654

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sale Size (Ac.)</strong></td>
<td>3,654</td>
</tr>
<tr>
<td><strong>Total Sale Price</strong></td>
<td>$6,425,000</td>
</tr>
<tr>
<td><strong>Contribution of Land</strong></td>
<td>$3,271,822</td>
</tr>
<tr>
<td><strong>Improvements</strong></td>
<td>$295,000</td>
</tr>
<tr>
<td><strong>Government Lease</strong></td>
<td>$0</td>
</tr>
<tr>
<td><strong>Remainder</strong></td>
<td>$2,858,178</td>
</tr>
<tr>
<td><strong>Contribution of River to Value</strong></td>
<td>44.5%</td>
</tr>
<tr>
<td><strong>River Miles</strong></td>
<td>2.84</td>
</tr>
<tr>
<td><strong>Price/Mi</strong></td>
<td>$1,006,401</td>
</tr>
</tbody>
</table>

### Wyoming Game & Fish Stream Classification

- **BLUE** = > 600 pounds/mile
- **RED** = 300 to 600 pounds/mile
- **YELLOW** = 50 to 300 pounds/mile
- **GREEN** = < 50 pounds/mile
Sale 3: Encampment River – Riverside, WY

0.63 Miles of Encampment River (Blue)
0.62 Miles of Cherokee Creek (Green)
Price: $2,850,000

Blue Stream
## Land Types & Value

Total Acres: 680

<table>
<thead>
<tr>
<th>Land Classification</th>
<th>Pixels</th>
<th>% of Total</th>
<th>Acres</th>
<th>Average $/Ac</th>
<th>Contributory Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mountain/Timber</td>
<td>32</td>
<td>1.04%</td>
<td>7.1</td>
<td>$2,169</td>
<td>$15,371</td>
</tr>
<tr>
<td>Irrigate Meadow</td>
<td>2,003</td>
<td>65.24%</td>
<td>443.7</td>
<td>$2,329</td>
<td>$1,033,361</td>
</tr>
<tr>
<td>Upland Grass/Sage</td>
<td>69</td>
<td>2.25%</td>
<td>15.3</td>
<td>$731</td>
<td>$11,179</td>
</tr>
<tr>
<td>Subirr &amp; Pasture</td>
<td>924</td>
<td>30.10%</td>
<td>204.7</td>
<td>$1,295</td>
<td>$264,938</td>
</tr>
<tr>
<td>Other</td>
<td>42</td>
<td>1.37%</td>
<td>9.3</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,070</td>
<td></td>
<td>680.0</td>
<td></td>
<td><strong>Total Land Value</strong> $1,324,849</td>
</tr>
</tbody>
</table>
## Value of River Access/Fishing Resources

**Total Acres:** 3,654

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sale Size (Ac.)</td>
<td>680</td>
</tr>
<tr>
<td><strong>Total Sale Price</strong></td>
<td>$2,850,000</td>
</tr>
<tr>
<td>Contribution of Land</td>
<td>$1,324,849</td>
</tr>
<tr>
<td>Government Lease</td>
<td>$0</td>
</tr>
<tr>
<td>Improvements</td>
<td>$152,000</td>
</tr>
<tr>
<td>Remainder</td>
<td>$1,373,151</td>
</tr>
<tr>
<td><strong>Contribution of River to Value</strong></td>
<td>48.2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>River</th>
<th>Miles</th>
<th>Lbs. of Fish</th>
<th>Total Fish (Lbs.)</th>
<th>% of Total Fish</th>
<th>Value Contribution</th>
<th>Price/Mi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encampment River</td>
<td>0.63</td>
<td>600</td>
<td>378</td>
<td>96.1%</td>
<td>$1,319,063</td>
<td>$2,093,750</td>
</tr>
<tr>
<td>Cherokee Creek</td>
<td>0.62</td>
<td>25</td>
<td>15.5</td>
<td>3.9%</td>
<td>$54,089</td>
<td>$87,240</td>
</tr>
</tbody>
</table>

### Wyoming Game & Fish Stream Classification

- **BLUE** = > 600 pounds/mile
- **RED** = 300 to 600 pounds/mile
- **YELLOW** = 50 to 300 pounds/mile
- **GREEN** = < 50 pounds/mile

**Total River Miles Lbs. of Fish Total Fish (Lbs.) % of Total Fish Value Contribution Price/Mi**

<table>
<thead>
<tr>
<th>River</th>
<th>Miles</th>
<th>Lbs. of Fish</th>
<th>Total Fish (Lbs.)</th>
<th>% of Total Fish</th>
<th>Value Contribution</th>
<th>Price/Mi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encampment River</td>
<td>0.63</td>
<td>600</td>
<td>378</td>
<td>96.1%</td>
<td>$1,319,063</td>
<td>$2,093,750</td>
</tr>
<tr>
<td>Cherokee Creek</td>
<td>0.62</td>
<td>25</td>
<td>15.5</td>
<td>3.9%</td>
<td>$54,089</td>
<td>$87,240</td>
</tr>
</tbody>
</table>

**Total:** 393.5
Sale 4: North Platte River – Saratoga, WY

1.1 Miles of N. Platte River
Price: $2,250,000
Conservation Easement on Property.
No subdivision allowed.
Value of River Access/Fishing Resources

Total Acres: 640

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sale Size (Ac.)</td>
<td>640</td>
</tr>
<tr>
<td>Total Sale Price</td>
<td>$2,250,000</td>
</tr>
<tr>
<td>Contribution of Land</td>
<td>$469,896</td>
</tr>
<tr>
<td>Improvements</td>
<td>$714,000</td>
</tr>
<tr>
<td>Gov't Lease</td>
<td>$0</td>
</tr>
<tr>
<td>Remainder</td>
<td>$1,066,104</td>
</tr>
<tr>
<td>Contribution of River to Value</td>
<td>47.4%</td>
</tr>
<tr>
<td>River Miles</td>
<td>1.1</td>
</tr>
<tr>
<td>Price/Mi</td>
<td>$969,186</td>
</tr>
</tbody>
</table>

Wyoming Game & Fish Stream Classification

- **BLUE** = > 600 pounds/mile
- **RED** = 300 to 600 pounds/mile
- **YELLOW** = 50 to 300 pounds/mile
- **GREEN** = < 50 pounds/mile
## Comparing River Types

<table>
<thead>
<tr>
<th>River</th>
<th>Classification</th>
<th>Price/Mi.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cherokee Creek</td>
<td>Green</td>
<td>$87,240</td>
</tr>
<tr>
<td>Dale Creek</td>
<td>Green</td>
<td>$146,478</td>
</tr>
<tr>
<td>Little Laramie River</td>
<td>Red</td>
<td>$1,006,401</td>
</tr>
<tr>
<td>North Platte River</td>
<td>Blue</td>
<td>$969,186</td>
</tr>
<tr>
<td>Encampment River</td>
<td>Blue</td>
<td>$2,093,750</td>
</tr>
</tbody>
</table>