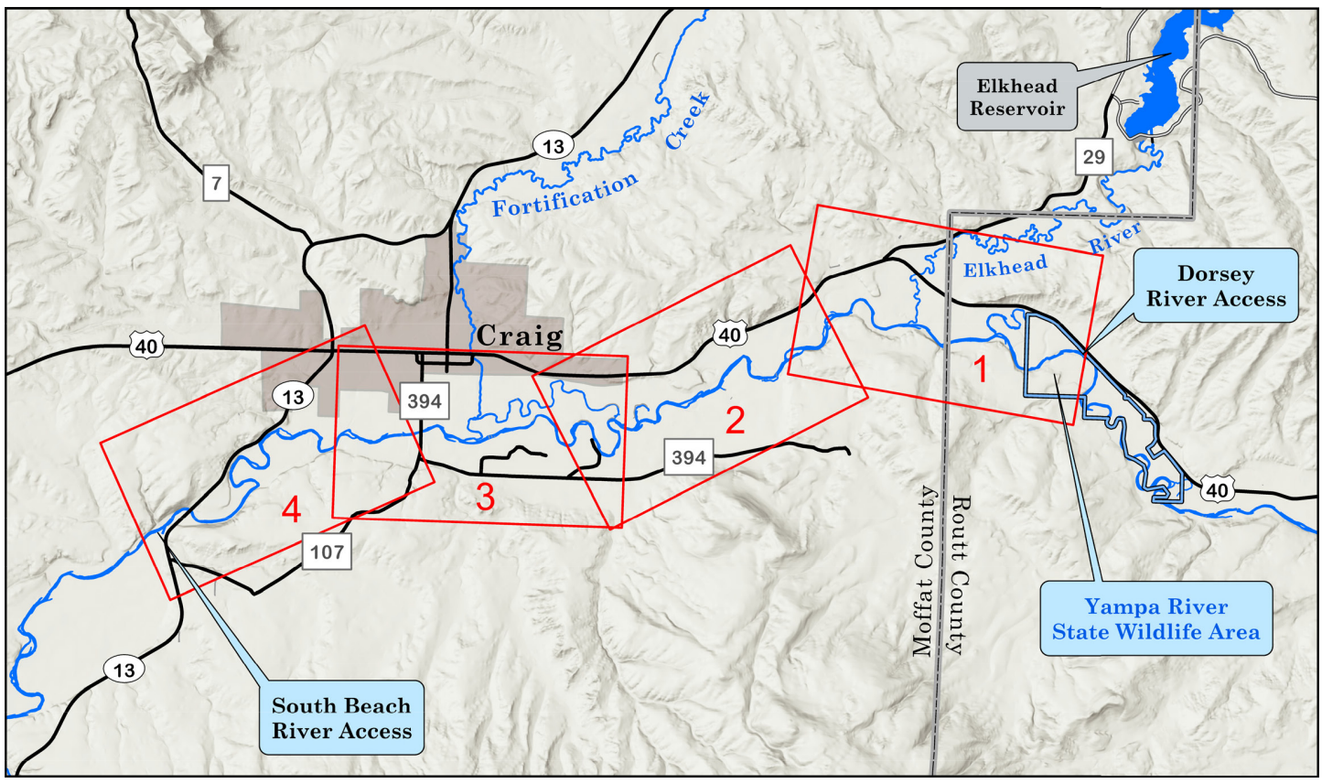
YAMPA RIVER GUIDES

Craig Reach



Craig Reach Legend

Hydrographic Features

- Stream or Mainstem Ditch
- Intermittent Stream
- Branch Ditch
- Irrigation Pipe or Culvert
- Irrigation Pump
- Center-Pivot Irrigation
- 125 River Mile

Roads and Structures

- Dirt Trail
- Paved Trail
- 4WD
- Graded Road
- Paved Road
- Railroad
- Power Line
- Buildings

Administrative Boundaries

- Moffat County Park
- Craig City Park
- Yampa River State Park
- Yampa River State Wildlife Area
- Bureau of Land Management

Environmental Features

- Active or Prehistoric Floodplain
- Riparian Herbaceous/Short Shrub
- Riparian Tree/Tall Shrub Canopy
- Upland Tree/Shrub Cover
- Fluvial Sand or Gravel
- Gravel Quarry

Recreational Area Symbols

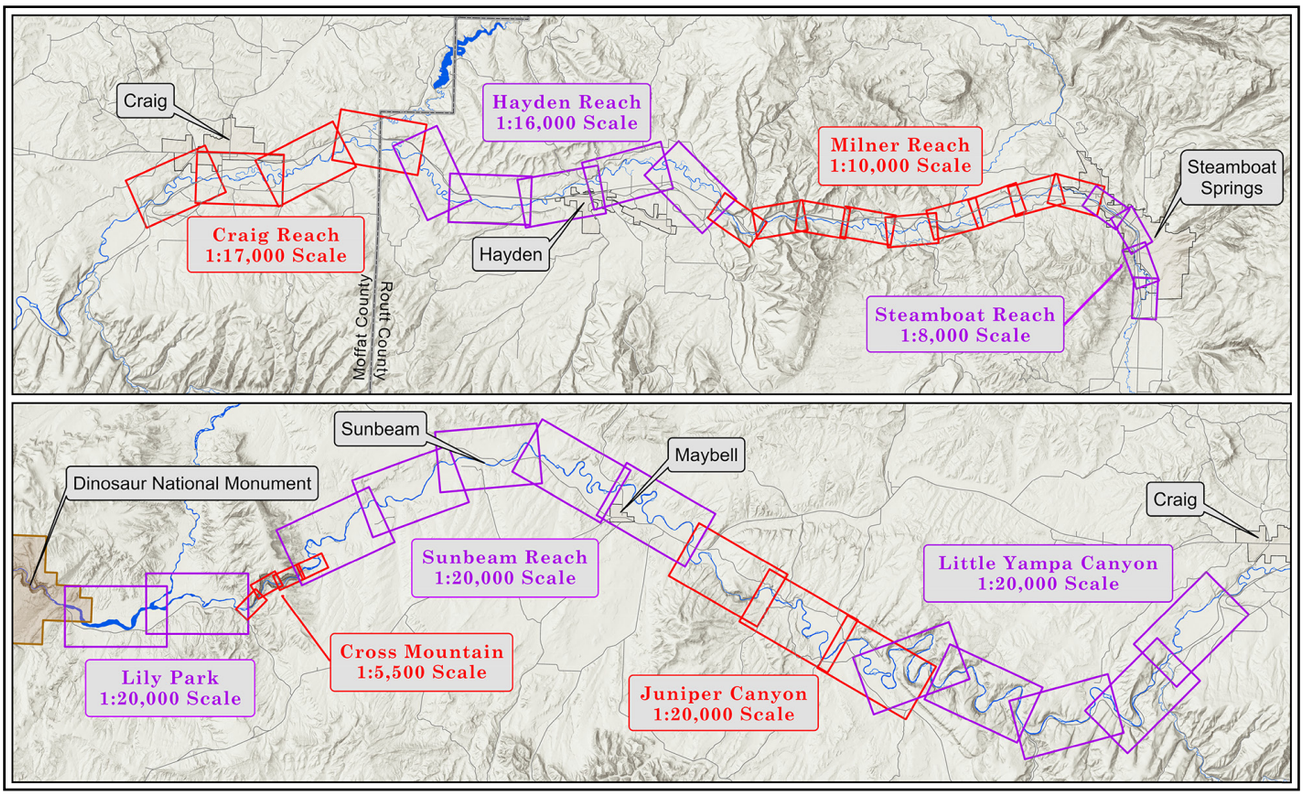
- Fee Area
- Trailered Craft Access
- Small Craft Access
- Tubing
- Picnic Tables
- Rest Rooms
- Longterm Parking
- No Camping

Version Date August 7, 2026

YAMPA RIVER GUIDES

Yampa River Guides are a FREE, downloadable series of map guides in PDF format, designed for recreational users of the Yampa River. When the entire series is completed they will cover approximately 158 miles of river, from the Chuck Lewis State Wildlife Area upstream of Steamboat Springs to the Deerlodge Park boat ramp on the eastern boundary of Dinosaur National Monument.

The Yampa River Guide Series



How to Download and Print Your Guides

Go to **https://guides.wildyampa.com** to download the most recent versions of the Yampa River Guides. Every attempt will be made to keep these guides up-to-date as boater access and river conditions evolve in the future. You can check the version date of your download at the bottom of the front cover and on each map page.

Printing on Legal Paper

Ideally, your Yampa River Guide should be printed on legal-size paper, using a duplex (prints to both sides) printer. Whether you can print to both sides of the paper or not, be sure to select the "Actual Size" option in the print wizard (this keeps the printer software from adding an extra margin to the printed page).

Duplexed pages will lay out like a book, with each map page on the right and its corresponding text page facing it on the left. Your pages can then be stapled, or laminated and spiral bound for a more durable guide. You might also consider printing on waterproof paper.

Printing on Letter Paper

Yampa River Guides can also be printed successfully on letter-size paper—the maps and print will just appear smaller. When printing on letter-size paper, be sure to select the "Fit" or "Fit to Page" option in the print wizard.

Help Keep These Guides Accurate

The Yampa River is always in a state of flux, so over time even the best map is destined to become inaccurate. Legal river access for boaters is also a moving target. And of course, the author of this guide makes no claim to infallibility. If you discover errors or have suggestions for improvement, please E-mail **Pete@wildyampa.com** with "Yampa River Guides" in the subject line. Or just let me know if you are finding these guides helpful!

Terms of Use

The Yampa River Guides are FREE to download and print for personal recreational use. Any other reproduction or publication of these guides, or any portions thereof, is strictly prohibited.

If someone is charging you for the contents of this guide, they are in copyright violation.

Maps, text and uncredited photographs © Peter A. Williams

About The Maps

As has become the convention with river guides, the Yampa River Guide maps and their accompanying text are laid out with the river running from the **bottom to the top** of the page.

The river channels and environmental features depicted on these maps were originally drawn directly on top of the 2019 National Agricultural Imagery Program (NAIP) **aircraft overflight photography**. However, since 2019 there have been several significant changes in the river channels, and more should be expected in the future. Yampa River Guide maps are regularly revised as the river evolves, using as reference the most recently available photography. NAIP offers superior resolution and detail, but is only updated every two or three years (most recently 2023). During the interim, the online version of Copernicus/Sentinel-2 satellite photography, although much lower in resolution, is conveniently updated weekly.

An aerial photograph, or the map drawn from it, can only capture a dynamic, seasonally evolving river in one moment of time. These maps depict the river during a period of low flows, when the river channels are filled with **exposed sand and gravel bars**. Higher flows in the spring will inundate many of these features, and normally dry backwater channels may even be floatable under those conditions. Conversely, it is assumed that during lower flows boaters will appreciate having some idea of where the sand and gravel is likely to emerge.

The **river miles** (RM) depicted on these maps are measured upstream from the confluence of the Yampa and Green rivers at Echo Park, in Dinosaur National Monument. They were created specifically for these maps, and follow a line up the center of the main river channel as it existed in the fall of 2019. Note that there has never been a formal, "official" set of designated river miles for the Yampa River. River miles depicted on maps elsewhere have typically been based on long out-of-date hydrographic data, and can vary from the Yampa River Guide maps by as much as a mile or more.

Private Property

Private property boundaries are not represented on any of these maps. The only property boundaries depicted in the Yampa River Guides are for publicly owned (or publicly leased) properties that specifically allow for public boating access. ***Everywhere else should be treated as off limits to or from watercraft traveling the Yampa River***.

Under Colorado law, ownership of the river bank does not stop at the high water line. While the water and fish may belong to someone else, the **river bottom is the property of the abutting landowners**. Under these circumstances, standing on the river bottom, even in moving water, is trespassing. This can especially be a problem once river flows drop enough to require dragging your craft over obstacles. Please avoid floating the Yampa River when and where such conditions exist.

Much of the Yampa River from Steamboat Springs to Dinosaur National Monument flows through private land. Please help us stay on good terms with our private landowning neighbors, so boaters can continue to float the Yampa River without further restrictions in the future. Always stay in your boat when floating through private property.

Safety

The Yampa River Guides are intended for use as a general resource for boaters. ***They are not a substitute for staying alert to hazards and practicing good boating skills***. Rivers are dynamic environments, and conditions can change dramatically as water levels rise and fall.

With the exception of the Cross Mountain and Juniper canyons, experienced boaters will find the "whitewater" character of the portions of the Yampa River covered by the Yampa River Guides to be mild. Nevertheless, natural hazards such as strainers or entrained wood may still be encountered. Human-made structures, especially bridges and diversion structures, can also create significant hazards to boaters. The most notorious (but certainly not all) of these structural hazards have been identified on the maps with **red-bordered labels**. When you see these labels, pay close attention to the "**Hazard!**" description in the accompanying text.

Always come prepared for the unexpected. Pay attention, and always keep an eye out downstream. Proper personal equipment should always include a PFD (Personal Flotation Device), appropriate footwear, and sunscreen. And, although much of the Yampa is flatwater, the knowledge gained from a swiftwater rescue course might one day help you save a life, even in downtown Steamboat Springs. In Cross Mountain and Juniper canyons such knowledge is essential.

Ultimately YOU are responsible for your own and your companions' safety.

Disclaimer

The author and distributors of the Yampa River Guides are not responsible for trespass, property damage, personal injury, or death resulting from activities involving anyone using or possessing these river guides.

Craig Reach Map 1

River Mile (RM) topics follow the flow of the river, from the bottom of the page to the top.

RM 154 A line of old cars visible along the top of a bluff on river right marks the south edge of the **Ike's Transmission** auto salvage yard.

Somewhere in this vicinity, in 1872, brothers **Joseph and David Morgan** established the **first trading post in the Yampa Valley**. In a lecture presented at the 1909 Routt County Pioneer Day celebrations, Dr. Joseph A. Campbell (in his role as historian for the Pioneer Association), described their original "mercantile building" as a one-room log cabin located "close to the river bank," just below the confluence with the Elkhead. However, due to the area's seasonally soggy terrain, the Morgans later moved their establishment to "the top of the little hill as you travel west, about half a mile from the bridge across Elkhead Creek." This would appear to match the location of today's auto salvage yard.

Joe, the older brother, was the main proprietor of the business, trading tobacco, flour, sugar, coffee and ammunition with Ute hunters and occasional white trappers traveling the river corridor. In return, he received hides, horns and furs, destined for markets back East. Dave was the freighter for the business, driving a wagon to and from the railroad stop at Rawlins, Wyoming (a hundred miles each way). He also contracted to carry supplies from Rawlins to the White River Agency on the Ute Reservation, near present-day Meeker.

A ledger for the trading post still exists in the collections of the Museum of Northwest Colorado. It documents the trade with a number of notable Utes from this period. Joe had a reputation for being good natured and honest, and he engendered enough respect among the local Utes that in 1879 they personally alerted him to the potential for an uprising at the White River Agency. Those events, and the subsequent expulsion of the Utes from Northwest Colorado, spelled the end of the trading business for Joe. He moved north across the Little Snake River, where he made a home, got married, and ranched until his death at 78, in 1922.

Dave Morgan took a slightly different path. His travels to the White River Agency introduced him to the attractions of the Axial Basin, south of Lay, and by 1879 he had already homesteaded his own ranch there. In later years he was running the ranch with his older brother Charlie, but when Charlie died in 1917, Dave lost interest, telling folks that it would be "too lonely" to continue on alone. He sold the ranch and moved back closer to Craig, where he remained a familiar character in the community until his death in 1936, at the age of 91.

RM 154.4 Keep watch for where **Elkhead Creek** joins the Yampa River on river right.

RM 155 You are now crossing the **county line**. Routt County was split off of Grand County by the state legislature in 1877, less than a year after Colorado had gained statehood. The original Routt County stretched all the way west to the Utah line. The long distances between the county seat at Hahn's Peak and the "low country" communities of Maybell and Craig eventually led to Moffat County being split off of Routt in 1911, with Craig as the county seat.

RM 156.25 After pushing off from the boat ramp, you will soon **leave the Yampa River State Wildlife Area** behind. The next public access along the river will be the Yampa Valley Golf Course's Pebble Beach, about 9 miles downstream of the Dorsey boat ramp.

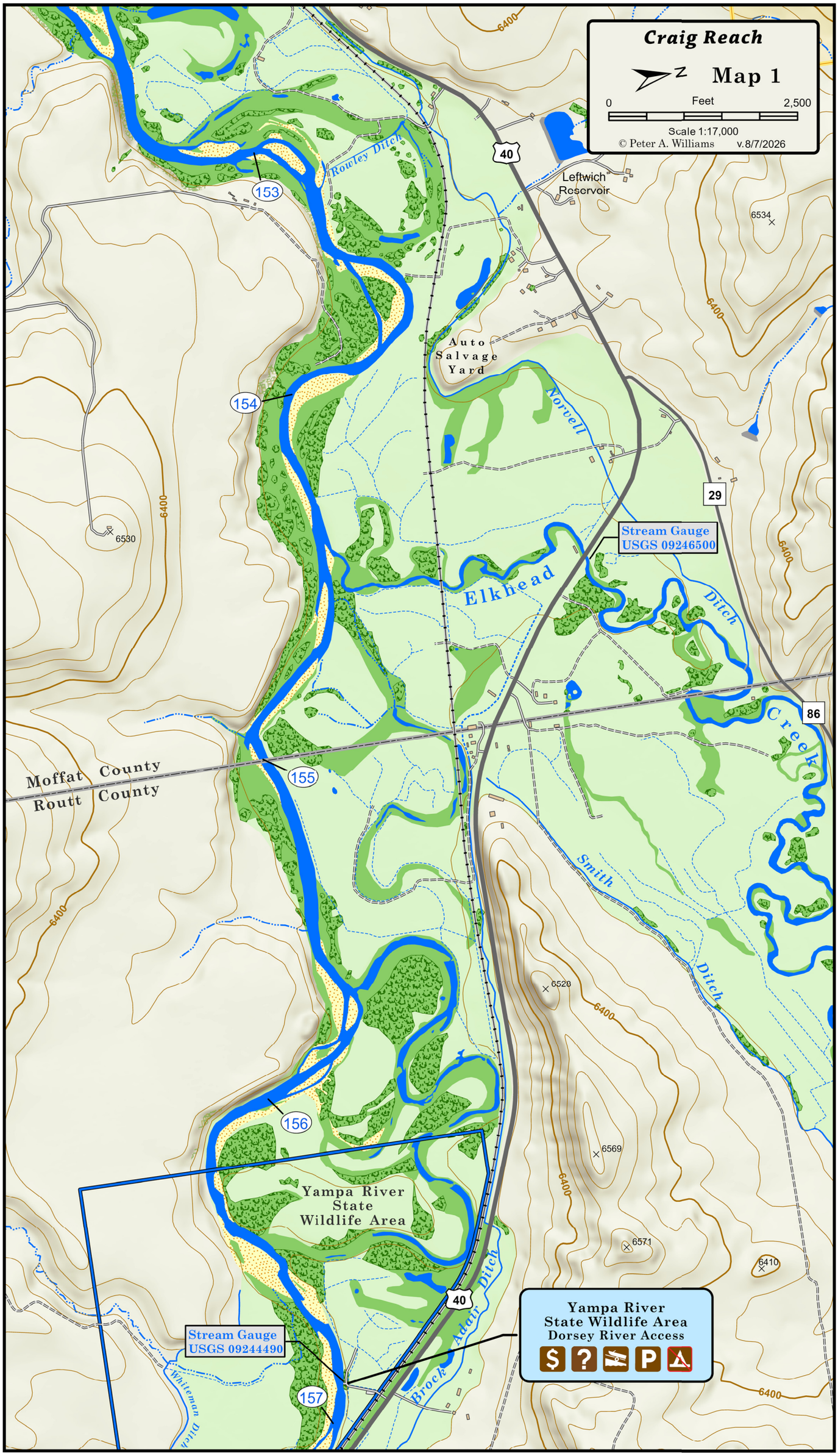
Yampa River State Wildlife Area

The Craig Reach begins at the downstream end of the Yampa River State Wildlife Area (YRSWA). The YRSWA protects important riparian habitat along the Yampa River, and is a popular destination for waterfowl hunting, fishing, and bird watching. Camping, overnight parking, and fires are prohibited. As with all state wildlife areas in Colorado, either a valid hunting or fishing license, or a State Wildlife Area (SWA) pass is required for each individual, age 16 or older. Access to and use of the boat ramp is included in this requirement. Also note that a SWA pass is separate from the Colorado State Park pass you may have purchased with your vehicle registration. In Colorado, state wildlife areas and state parks are different entities, with different passes.

The **Dorsey boat ramp** is reached from US Highway 40 at a turnoff approximately 2 miles east of the Moffat/Routt county line, or 5 miles west of the Yampa River State Park Headquarters. The turn is marked with a generic brown Yampa River State Wildlife Area sign, but there is also a small white railroad utility building at the track crossing, prominently labeled as "Dorsey"—which lends the boat ramp its popular name. Please don't leave vehicles parked at the ramp itself. After unloading, park them at the lot close to the highway.

Information courtesy:
Colorado Historic Newspapers Collection, Colorado State Library
Museum of Northwest Colorado

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Craig Reach
Map 1
N
0
Feet
2,500
Scale 1:17,000
© Peter A. Williams v.8/7/2026
Rowley Ditch
153
40
Leftwich Reservoir
6534
6400
Auto Salvage Yard
154
Norvell
29
6530
Stream Gauge USGS 09246500
Elkhead
Ditch
Creek
86
Moffat County
Routt County
155
Smith
Ditch
6520
156
6569
Yampa River State Wildlife Area
6571
6410
40
Yampa River State Wildlife Area
Dorsey River Access
Stream Gauge USGS 09244490
Whiteman Ditch
157
Brock Adair Ditch

Craig Reach Map 2

River Mile (RM) topics follow the flow of the river, from the bottom of the page to the top.

RM 147.75 The **Pebble Beach** river access is the large beach on river left.

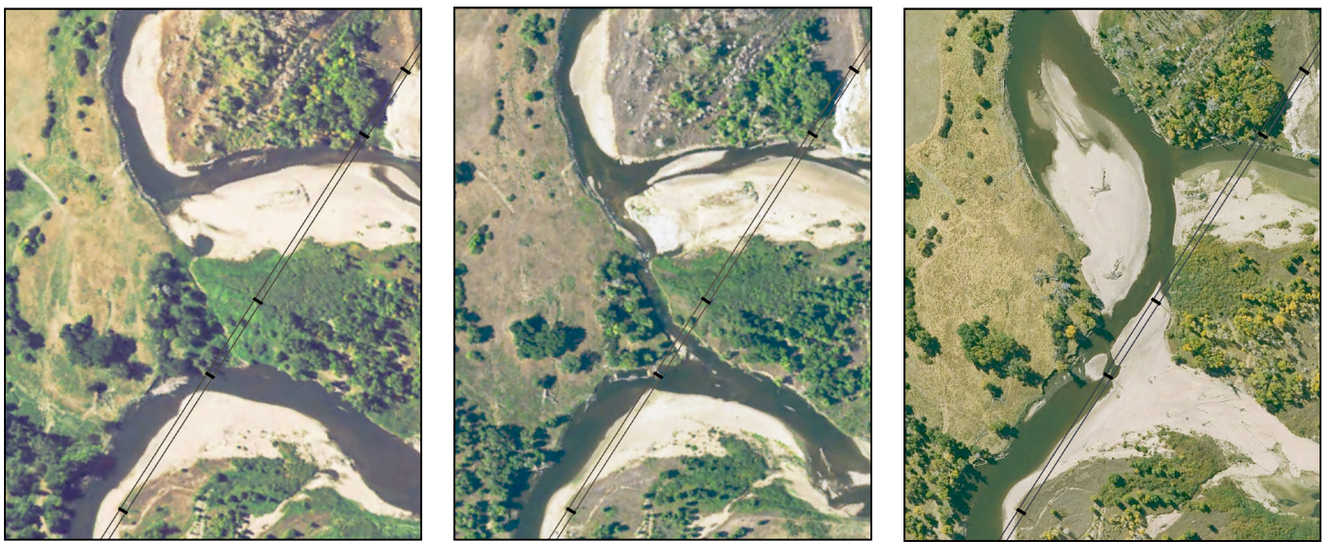
RM 148.8 The **Anna Branch** leaves the main channel of the Yampa River on river right, just before the river begins a sharp bend to the left. After meandering around for nearly four miles (and after being joined by Fortification Creek), the Anna Branch finally reenters the main channel just downstream of the new Craig River Park.

In late June 2019, another kind of **meander shortcutting** occurred immediately below the head of the Anna Branch, when high water (about 11,500 cfs) breached the bank and redirected the Yampa into an active gravel quarry pit. The river had nowhere else to go, so quickly cut its way back out of the pit into the main channel directly across from Pebble Beach. The NAIP photography on the right is how it appeared in the fall of 2019, at low water. The breaches were repaired in late March 2020, finally putting the river back in its natural channel.



RM 149.6 At this spot **power poles** appear in the middle of the river channel, marking where the Yampa River has recently cut a new course and **abandoned a major meander**.

The three photographs below are oriented to match Map 2, and show the "neck" of the meander at RM 149.6. The image of the power line superimposed on each photo accurately depicts the location of the individual poles, two of which are now in the active river channel.



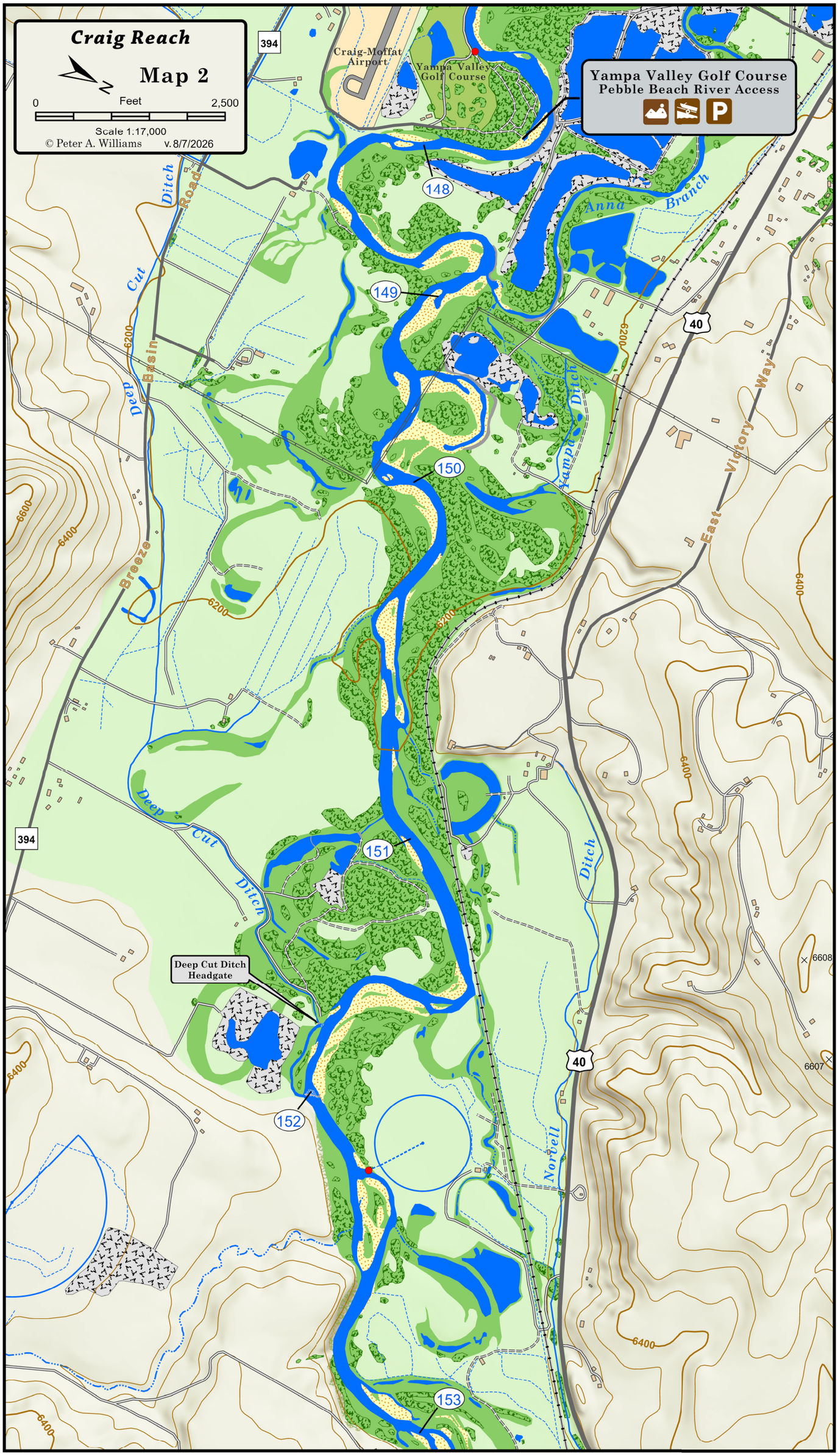
Aerial photography taken during the early fall of (left to right) 2019, 2021, and 2023.
National Agricultural Imagery Program

The process began very gradually at first, but then accelerated dramatically. Earlier aerial photography (not shown) reveals that a faint linear feature had already been cut across the neck of the meander as early as 1993. Looking more like a game trail than a channel, it appears to have only carried a trickle of water, and then only during flood years. The situation remained fairly static for a quarter century, until the spring peak flows of 2019.

In the fall 2019 photo (left), you can see that a very distinct, yet still quite narrow channel has now been cut across the neck of the meander. It is dry in the photograph, but the circular pool excavated from the sandbar at the downstream end testifies to a period of high-energy flow earlier in the season. By 2021 (center), the channel has widened substantially, and is now deep enough to carry water even during periods of low flow. However, it still departs the main channel at an abrupt angle to the majority of the current. Finally, the 2023 photo (right) shows a mature channel that has been widened and straightened by the full force of the current at high water, and has been cut deep enough to capture the entire flow of the river at low water. Today the original meander channel only runs during periods of high water.

Information courtesy:
Google Earth
National Agricultural Imagery Program (NAIP)

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Craig Reach
Map 2
0
Feet
2,500
Scale 1:17,000
© Peter A. Williams
v. 8/7/2026
394
Craig-Moffat Airport
Yampa Valley Golf Course
Yampa Valley Golf Course
Pebble Beach River Access
148
149
150
151
152
153
Deep Cut Ditch Headgate
Deep Cut Ditch Road
Deep Basin Breeze
Anna Branch
Yampa Ditch
East Victory Way
Deep Cut Ditch
Nordell Ditch
40
6200
6400
6600
6608
6607

Craig Reach Map 3

River Mile (RM) topics follow the flow of the river, from the bottom of the page to the top.

RM 144.5 The new **lower Loudy Simpson Park boat ramp** can also sneak up on you at higher flows. However, once you've pulled in, it offers a large, calm eddy with room for multiple rafts. Tubers are **strongly advised not to continue downriver** below this ramp.

RM 144.75 Keep a close eye out for the **upper Loudy Simpson Park boat ramp**, which may be hard to see from upstream, and will come up fast at higher flows. The upper boat ramp is a smaller alternative to the lower ramp just downstream, but can still handle a couple of rafts at a time. It's the preferred takeout for smaller watercraft (kayaks, SUPs, inner tubes).

RM 145.1 The river passes under the Ranney Street (Highway 394) bridge at this point.

The **first bridge built across the Yampa River in Craig** was opened for travel in early 1892, when the river channel still followed the meander just to your south. Critical for travel to Hamilton and the Axial Basin, it was severely damaged by flood debris in 1917, rebuilt, and then finally replaced in 1926. Rather than simply rebuilding the original bridge over the meander, a novel strategy was used—the replacement bridge was first built over dry land, and then a new river channel was excavated beneath it. The old meander was blocked off, and now forms the ponds on either side of the present highway. The replacement bridge served for another 56 years before it was itself replaced in 1982 by the present Ranney Street bridge.

RM 146.1 The new **Craig River Park** is a keystone part of the Yampa River Corridor Project. The whitewater structures in the river provide a fun, short set of rapids for boaters passing through, as well as easily accessible play waves for tubers, kayakers and paddleboarders. A concrete-surface, river-side "portage trail" also provides a convenient path for tubers and small craft paddlers who wish to avoid the rapids while on their way downstream, or a quick return upstream for those desiring repeat runs. Look for access to the upstream end of the path in an eddy on river left, about fifty yards upstream of the water intake structure prominently extending out into the river.

RM 147.75 The Yampa Valley Golf Course **Pebble Beach** river access is the large beach on river left. There is no boat ramp, but there is automobile access and lots of room along the beach for launching or taking out. Pebble Beach is also a popular put-in for short afternoon floats to the Loudy Simpson river access points, or (for tubers and hand-carried craft only) the new Craig River Park. Larger craft coming downstream from the Yampa River State Wildlife Area's Dorsey river access can take out here, or continue on downstream to the Loudy Simpson Park facilities.

Yampa River Corridor Project

The Yampa River Corridor Project (YRCP) is a joint endeavor between the City of Craig and Moffat County. According to information found on the YRCP website,

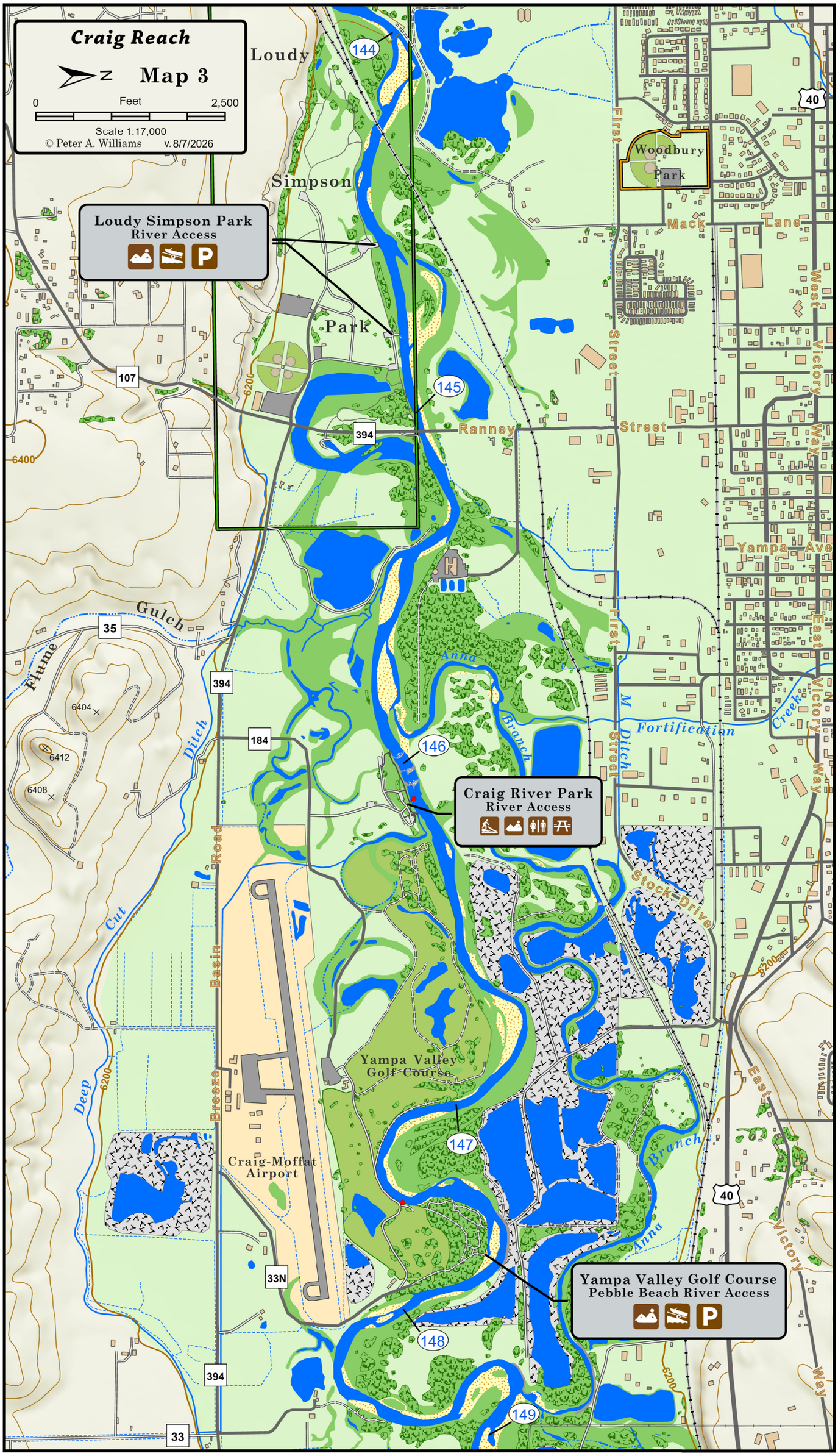
> "Development of a whitewater park and public access amenities on the Yampa River in the City of Craig was initially championed by our local chapter of Parrotheads in 2016 with the completion of a feasibility report and conceptual plans. Over time, the idea has attracted more interest, engagement and support as a project consistent with multiple community strategic planning documents for the City of Craig and Moffat County. The City of Craig and Moffat County have teamed up with a broad array of partners to move forward with the community vision and plans for the Yampa River Corridor Project. Implementation of the Yampa River Corridor Project will create a cohesive park system along the Yampa River on the south side of Craig."

Construction of the new, larger concrete boat ramp and parking area, just downstream of the original **Loudy Simpson Park** boat ramp, was completed in 2024. The parking area provides space for 9 boat trailers and 28 single vehicles, plus three ADA accessible spaces.

The **Craig River Park** is the gem of the YRCP. The two engineered whitewater drop features were completed in 2025, replacing the aging diversion weir for the City of Craig's municipal water plant intake. These in-river rock structures provide enhancements for fishermen (and fish), floaters, boaters, waders and swimmers. Construction of the riverside park complex, adjacent to the whitewater features, was completed in the spring of 2026. The onshore facilities include walking trails, picnic shelters, ADA-accessible restrooms, parking areas, and river access for anglers and small (hand-carried) watercraft.

Information courtesy (click on the web links!):
Colorado Historic Newspapers Collection, Colorado State Library
City of Craig Parks, Recreation, Open Space and Trails Master Plan (2019)
Yampa River Corridor Project and **Craig River Park** websites

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Craig Reach
Map 3
0
Feet
2,500
Scale 1:17,000
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Loudy
Simpson
Park
Loudy Simpson Park
River Access
144
145
146
147
148
149
107
394
35
184
33N
33
40
6400
6200
Ranney Street
First Street
Mack Lane
West Victory Way
East Victory Way
Yampa Ave
Woodbury Park
Gulch
Plume
Ditch
6404
6412
6408
Anna M Ditch
Fortification Creek
Craig River Park
River Access
Road
Basin
Cut
Deep
Breeze
Craig-Moffat Airport
Yampa Valley Golf Course
Stock Drive
Anna Branch
East Branch
Yampa Valley Golf Course
Pebble Beach River Access

Craig Reach Map 4

River Mile (RM) topics follow the flow of the river, from the bottom of the page to the top.

RM 139.5 The **Yampa River State Park South Beach river access** is the obvious dirt boat ramp a couple tenths of a mile below the pumping station intake.

RM 139.7 The Craig Station pump station intake channel is on river left. While fishing is permitted from the banks of the channel, please don't enter the channel itself with any watercraft. The **Yampa River below Craig** stream gauge will also be visible on the river left bank just after you pass by the mouth of the intake channel.

RM 140.2 Passing under the **Highway 13 bridge** signals that you are getting close to the South Beach boat ramp.

RM 144.25 This railroad bridge carries the rails extending service to the Craig Station and the Colowyo Mine. The railroad splits into the two branches just after crossing the bridge.

RM 144.5 The **lower Loudy Simpson Park boat ramp** now carries the load for trailered watercraft. Tubing downstream of Loudy Simpson Park is *strongly* discouraged. Also note that the Moffat County Loudy Simpson Park **web page** includes this request: *"If you are using this area as a launch for a river float trip, please contact the Moffat County Sheriff's Office at (970) 824-4495 with your itinerary, in case of emergency."*

RM 144.75 With the completion of the larger boat ramp just downstream, in the future the **upper Loudy Simpson Park boat ramp** will likely become the ramp of choice for smaller watercraft (kayaks, SUPs, inner tubes).

The Moffat Road

As the twentieth century began, the Yampa Valley was still only accessible by horse, wagon, or stagecoach. While its potential for coal and cattle production had been well known to the outside world for at least 25 years, northwest Colorado's remoteness from any railhead remained a serious impediment to the commercial development of those resources. Cattle had to be driven long distances to reach a market, and exporting large quantities of coal was impossible.

Meanwhile, Denver had been sorely disappointed when the Union Pacific Railroad built its portion of the transcontinental railroad through Cheyenne, leaving Denver just a sidetrack off the national transportation grid. David H. Moffat and a group of investors responded in 1902 by incorporating the Denver, Northwestern and Pacific Railway (later reorganized as the Denver and Salt Lake Railway) to construct what became known as the "Moffat Road." The plan was for a direct railroad connection from Denver to Salt Lake City, via the Fraser, Grand (aka Colorado), and Yampa river drainages, then on to Salt Lake via the Uinta Basin in Utah.

After engineering a spectacular crossing of the Continental Divide at Rollins Pass (and the equally remarkable passage down Gore Canyon), Moffat's railroad began service to Steamboat Springs early in 1909, followed by service to Craig and Hayden in late 1913. The first train to reach Craig arrived on November 22, and (despite the deep snow) was greeted by a crowd of two thousand enthusiastic people. Schools and businesses were closed, and a free dinner was served for 1,600 guests, with entrées of beef and fried rabbit.

The arrival of the Moffat Road provided a huge boost to Craig, suddenly allowing for rapid access to distant markets. Beneficiaries included the the local sheep producers. According to a display in the Museum of Northwest Colorado, by the 1940s Craig and Hayden were thought to be the highest volume railroad shipping points in the world for lambs and wool.

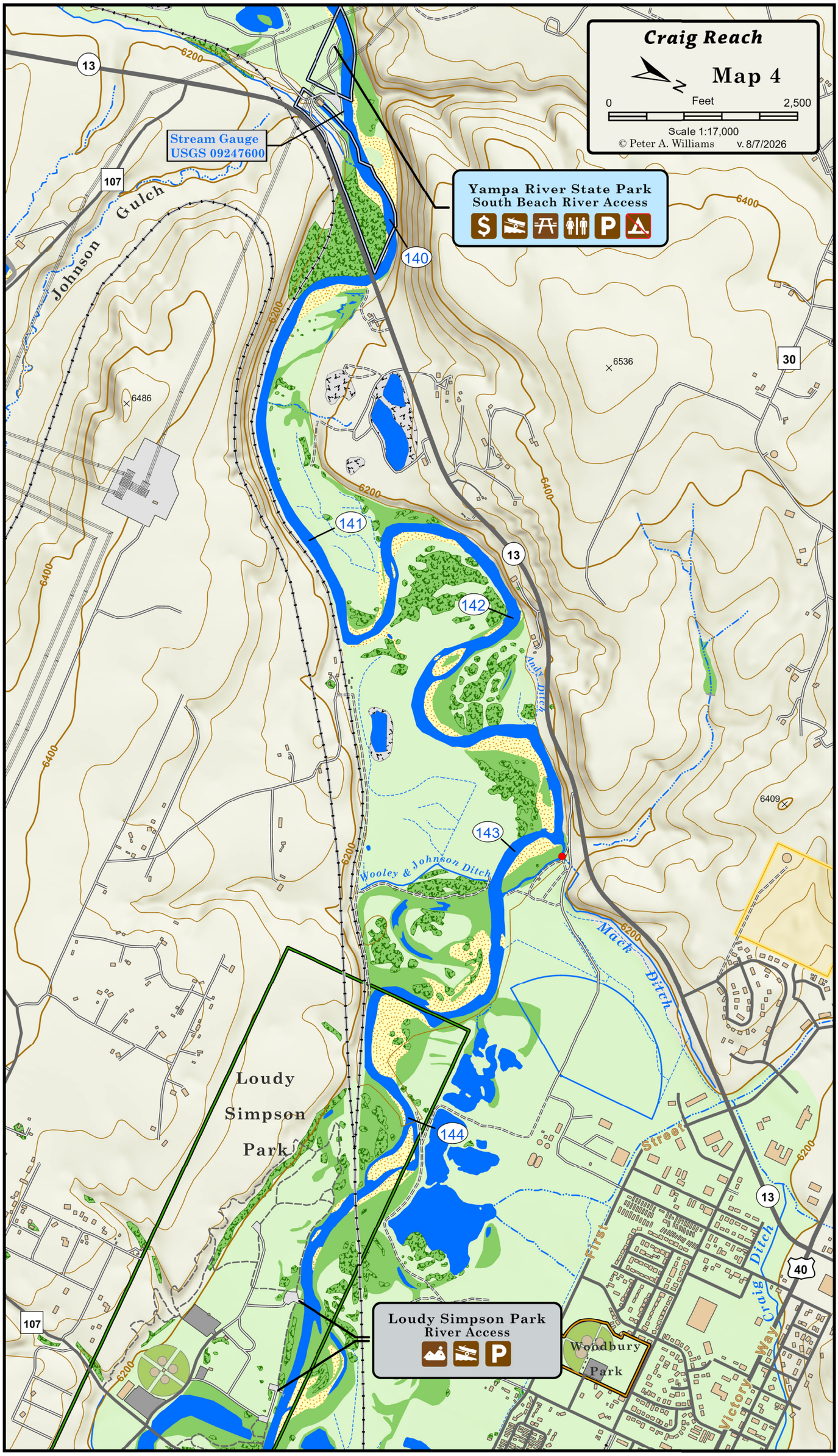
But David Moffat died in 1912, before the tracks to Craig had even been completed. Despite the lucrative coal- and stock-hauling business the railroad enjoyed in the Yampa Valley, the company he left behind remained in fragile financial straits. The debilitating cost of maintaining regular winter freight service over 11,660-foot Rollins Pass was a huge deficit against the railroad's income, and the economic means to continue the rails beyond Craig never materialized. Today the portion of the Moffat Road servicing the Yampa Valley remains just a branch line, owned and operated since 1996 by Moffat's old rival, the Union Pacific Railroad.

The Craig railyard remained the end of the road until the 1970s, when a short railroad extension was constructed to the new Craig Station, soon followed by a second, 25-mile-long branch constructed down the upper Little Yampa Canyon, giving the Colowyo Mine (near Axial, north of Meeker, Colorado), rail access to the national transportation grid.

Information courtesy:

Griswold, P.R., *David Moffat's Denver Northwestern and Pacific: "The Moffat Road"* (1995)
Griswold, P.R., *Denver and Salt Lake Railroad: 1913–1926* (1996)
Museum of Northwest Colorado

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Craig Reach
Map 4
0
Feet
2,500
Scale 1:17,000
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v. 8/7/2026
Stream Gauge
USGS 09247600
Yampa River State Park
South Beach River Access
Loudy Simpson Park
River Access
Loudy
Simpson
Park
Woodbury
Park
Johnson Gulch
Wooley & Johnson Ditch
Andy Ditch
Mack Ditch
Craig Ditch
First Street
Victory Way
140
141
142
143
144
13
107
30
40
6200
6400
6486
6536
6409

THE BACK PAGE

Craig Reach Stream Gauges

RM 156.9	**USGS #09244490** Yampa River above Elkhead Creek (Dorsey boat ramp)
NA	**USGS #09246500** Elkhead Creek near Craig
RM 139.7	**USGS #09247600** Yampa River below Craig (South Beach boat ramp)

The **Yampa River above Elkhead Creek** gauge is located at the Dorsey boat ramp, so it's the preferred resource when launching on the upper section of the Craig Reach.

Elkhead Creek is a small tributary to the Yampa River, and its impact on the Yampa River flows below its confluence is often quite small. However, on occasion releases out of the Elkhead Reservoir may be substantially increased, for a variety of reasons—so it may still be worth checking the gauge. On the other hand, a quicker and more convenient measure of the Yampa River flows downstream of Elkhead Creek is provided by the **Yampa River below Craig** gauge, located just upstream of the South Beach boat ramp.

Additional information and further flow recommendations for the Craig Reach can also be found at **https://friendsoftheyampa.com/know-before-you-go-craig/**.

Leafy Spurge Biological Control

Leafy spurge (*Euphorbia virgata*) is an exotic perennial weed that is highly detrimental to native ecosystems. Originally from Eurasia, leafy spurge readily establishes in rangeland, pasture, and riparian habitats, and can quickly become dominant. It grows up to three feet high, with distinctive yellowish-green flowers. If bruised, the leaves and stems exude a toxic white sap that can damage eyes or skin. The plant is poisonous to cattle and most wildlife. In June and July, you will see a lot of leafy spurge along the river banks of the Craig Reach.

Leafy spurge biological control involves the introduction of several insect species from the *Aphthona* and *Oberea* genera. These insects are true specialists, having co-evolved with leafy spurge in Eurasia to the point where they can only survive by eating and reproducing on the spurge—while the damage they inflict reduces the spurge's vitality and seed production.



Biological control released on leafy spurge.

Unlike most herbicides, leafy spurge biological control is safe to use in riparian habitats. It does not negatively impact desirable species, and it has the potential to be self-sustaining. Leafy spurge biological control insects were released in the Hayden area as early as 1989, though over the following three decades the use of leafy spurge biological control in the Yampa Basin generally remained infrequent. However, since 2019, the Yampa River Leafy Spurge Project (an ad hoc organization with multiple county, state and federal partners) has been promoting the use of leafy spurge biological control throughout the basin, and is now annually releasing large numbers of both *Aphthona* and *Oberea* at multiple sites from Hayden to the Yampa's confluence with the Green River.

The goal of biological control is *control* of the target species, rather than eradication, and the impact of biological control insects on leafy spurge can be quite different from herbicide use. While herbicides may quickly provide obvious mortality of the plant's foliage, biological control acts more subtly to reduce leafy spurge's overall long-term viability. Tall, dense, vigorously flowering stands will typically be reduced to patchier, sparsely flowering stands after the introduction of biological control. The result is reduced seed production—an important step towards reducing the waterborne seed load in the Yampa River and its associated ditch systems.



Three varieties of leafy spurge biocontrol—(l to r) black Aphthona, Oberea, and brown Aphthona.

Information and photographs courtesy (click on the web link!):

yampariverleafyspurgeproject.com