
COULEE CORRIDOR BYWAY BEAT

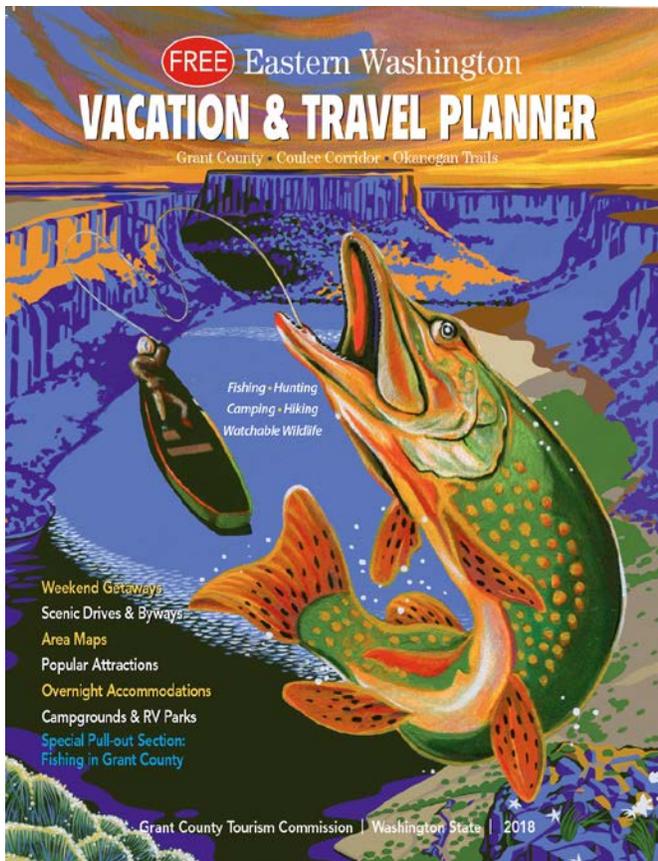
Volume 6. Issue 1

Coulee Corridor Consortium – Coulee Corridor National Scenic Byway February 2018

Eastern Washington Travel Planners

The Coulee Corridor National Scenic Byway is an integral part of a regional publication (whose cover is shown above with a special section shown below). Eighty thousand copies of this colorful glossy magazine were printed in 2018 and are distributed annually throughout Washington, the Pacific Northwest and points beyond.

To get your copy today, go to <http://www.nweekendgetaways.com/>, visit www.couleecorridor.com to request a copy or visit your local Chamber of Commerce.



Age Analyses and Theories of Locally Discovered Mammoth

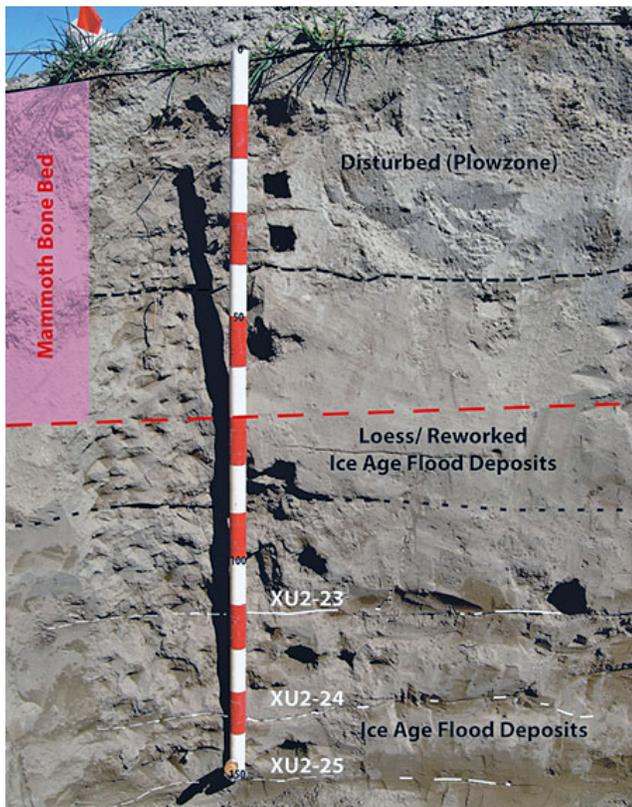
By Mark Amara

West of Othello, outside the SR262 spur of the Coulee Corridor National Scenic Byway is the physical record of an amazing discovery. In the spring of 2015, Luke Tonnemaker was moldboard plowing up an alfalfa field to prepare it for replanting at Tonnemaker Hill Farm on the north flank of the Frenchman Hills and found what appeared to be bones in the tilled ground. Mark Amara was contacted and put farm owners Luke and Kole Tonnemaker in touch with scientists George Last, Gary Kleinknecht, and Bax Barton at McBones Research Foundation in Kennewick, Washington. Last, a geologist, Barton, a paleontologist, Kleinknecht, a science teacher and Amara, soil scientist, archaeologist, and occasional geologist, and a crew from McBones spent considerable volunteer time excavating and stabilizing bones in and out of the field using rigorous scientific methods and controls over the next couple of years.

Last and Amara conducted detailed stratigraphic analyses describing the soils, sampling sediments for testing and collected volcanic ashes for dating. Bax Barton was instrumental in identifying individual bones, in confirming their identity and in determining they were from a single mammoth. There have been a number of bones recovered including the skull, minus the tusks, ribs, leg bones, ribs, and teeth.

The Tonnemakers continued to make new discoveries and kept a part of the field open for further excavation and analysis.

The group contacted and collaborated with Tammy Richenour, OSL Laboratory, University of Utah, who collected sediment samples for optical stimulated luminescence (OSL) dating and with Bonnie Blackwell, RFK Science Research Institute, Williams College, MA, who is conducting electron spinning resonance dating (ESR) analyses on the teeth.



The stratigraphic profile shows the likely environments of deposition. Loess overlies Ice Age flood deposits associated with the catastrophic Missoula Floods

Volcanic ash (tephra) samples were collected from three distinct layers below the bones. The tephtras were sent to the Peter Hooper GeoAnalytical Laboratory at Washington State University where electron microprobe analyses and tephra identification was conducted in the fall of 2015. The two lowermost ashes were

correlated to the Mt. St. Helens S series dated to about 16,000 years ago while the uppermost ash, which was less pure due most likely to bioturbation or mixed by redeposition, was tentatively identified as Mt. St Helens J series or about 14,000 years ago. Since the composition of the uppermost ash closest to (but below) the bones could have been compromised, or was mixed with tephtras from other sources due to fluvial or aeolian activity, attempts were made to find an undisturbed soil profile outside the field. In spring 2017, Kole Tonnemaker graciously dug additional backhoe holes about 400 meters northeast of the field. The stratigraphy of the best hole confirmed the presence of Mt. St. Helens S series (May 2017) but failed to confirm the presence of Mt. St. Helens J series.

In October 2015, optical stimulated luminescence soil samples were taken and analyzed by the University of Utah OSL Lab as another way to date the site. Dates generated confirmed that the area above the uppermost tephra was dated to about 16,000 years ago while the area just below the lowermost tephra was dated to about 20,000 years ago. Radiocarbon dating of the bone and dentin has so far been unsuccessful. However, another method called electron spinning resonance or ESR, is being conducted on one of the teeth to further date the animal with the results not yet available.



Geologists Mark Amara, pictured, and George Last described the soil profile and collected samples for analysis.

It is unknown how the mammoth came to rest in the Tonnemaker's field. However, there are many theories about how and when it arrived. The elevation the animal was found coincides with the shoreline of the highest Pleistocene age Missoula flood in the region and its association with a nearby gravelly berg mound seems to suggest it is associated with a late stage Missoula flood event. The mammoth itself lies in fine textured sediments indicative of quiet water conditions in a large body of water though the bones are overlain or intermixed with windblown loess. Slack water deposits associated with a large inland lake, called Lake Lewis, dropped sediment throughout the area and the location of the mammoth remains coincided with the purported shoreline of that post-Missoula floods lake.

We will probably never know if the animal was alive when it was ice rafted in, was intact as a carcass, or killed by early Native American hunters. The animal probably died in one place nearby which explains why so many bones from the same apparent animal are in such close proximity to one another albeit across a 20 meter wide area. It is possible predators and/or Native American hunters could have spread or carried off the remaining bones. However, there is no evidence of Native American impacts either by killing it, butchering, or using it as a food source as there are no artifacts directly associated with it though prehistorically utilized sites are nearby.

The dates acquired thus far coincide with Missoula flood events that occurred contemporaneously. The fact that the tephras could be identified and correlated is positive and they are known as significant time stratigraphic marker horizons. All the tephras are below or deeper in the soil profile than the sediments in which the bones are buried. The part of the soil profile in which the mammoth lies in is somewhat mixed by tillage, bioturbation,

fluvial and/or aeolian activity. By getting a precise date of the age of the mammoth, hopefully, with the ESR dating, it will help to pinpoint its actual age and give interpretations about when and in what kind of paleoenvironment (wet or dry) the animal was deposited more credibility as well as help explain what happened to one of the last mammoths to inhabit this region.



Kole and Luke Tonnemaker and Mark Amara described the mammoth findings at a poster presentation event at the Annual Meeting of the Geological Society of America, October 22, 2017 in Seattle, Washington

All pictures courtesy of McBones Research Foundation

References:

Amara, M. 2016. "Ancient Mammoth Unearthed" In: *Coulee Corridor Byway Beat*, Volume 5, Issue 1, March, p. 3-4.

Dodd, Jessica L., George V. Last, Mark Amara, Kole Tonnemaker and Luke Tonnemaker. 2016. "Tephra Chronology of the Frenchman Hills - Tonnemaker Mammoth Site: Shedding Light on its Geologic History." *Northwest Scientific Association Program and Abstracts*, March 23-26. Bend, OR, p. 51.

Last, G. V., M. S. Amara, F. F. Foit, Jr., O. K. Neill, T. Rittenour, J. L. Dodd, K. Tonnemaker, and L. Tonnemaker. 2017. Tephra and OSL Results from the Frenchman Hills - Tonnemaker Mammoth Site, Royal City, Grant County, Washington. *Geological Society of America Abstracts with Programs*. Vol. 49, No. 6. Doi: 10.1130/abs/2017AM-304854.

Annual Garden Symposium

The fourth annual Columbia Basin Eco-Gardening Symposium is being held April 21, 2018 9-1 PM at the Technical Skills Center, 900 E. Yonezawa Blvd, Moses Lake. The Grant-Adams Master Gardeners and Grant County Conservation District are co-sponsoring this event.

Speakers for the catchy theme of “Swing into Spring” include Allan Felsot, on applicability of pesticides in gardens, Karen Lewis, who will speak on managing home orchards, and Linda Chalker-Scott, who will discuss dispelling common garden myths. There is an exhibitor marketplace as well.

To register for this free event, go to www.columbiabasinncds.org or via phone/in-person at: Grant County Conservation District 1107 S. Juniper Drive, Moses Lake, WA. 98837. Tel: 509-765-9618

Registration may also be done at the door starting at 8:30 AM though the symposium will be limited to the first 100 registrants. There will be snacks and door prizes.

The Grant County Conservation District and
WSU Grant-Adams Master Gardener Program

Invite you to join us for the
Fourth Annual
Columbia Basin
Eco-Gardening Symposium



“Swing into Spring”

April 21, 2018
9 am to 1 pm

Technical Skills Center, 900 E. Yonezawa Blvd
Moses Lake, Washington

No cost but to ensure we have ample refreshments and seating please
preregister online at/or by phone
www.Columbiabasinncds.org
509-765-9618

  Master Gardener
Program
WASHINGTON STATE UNIVERSITY
EXTENSION

Othello Sandhill Crane Festival

OTHELLO, Washington. All the pieces are finally in place for the 2018 Othello Sandhill Crane Festival, March 23-25. This year’s theme is “H2O & Birds on the Go.” In the past, the festival has focused primarily on the area’s wildlife. This year, there is a much greater emphasis on the reason the wildlife is there—the abundant water in the forms of irrigation and wetlands. “I’m excited about this theme, because without natural water or irrigation water, many of the birds and wildlife would not be here,” noted Kurt Braunwart, Co-chair of the Festival. “Just as clean water is important for people, it is also a key to healthy wildlife.”

While the focus of the Festival is celebrating the spring migration of the Sandhill cranes, there are plenty of opportunities for the whole family to enjoy and learn about everything the Columbia Basin has to offer. Children’s activities will keep youngsters entertained, while adults can take part in lectures on topics ranging from drones and agriculture to wildlife to the area’s fascinating geologic history. Of course, the crane, birding, refuge, geology and agricultural tours are the highlight of the Festival.

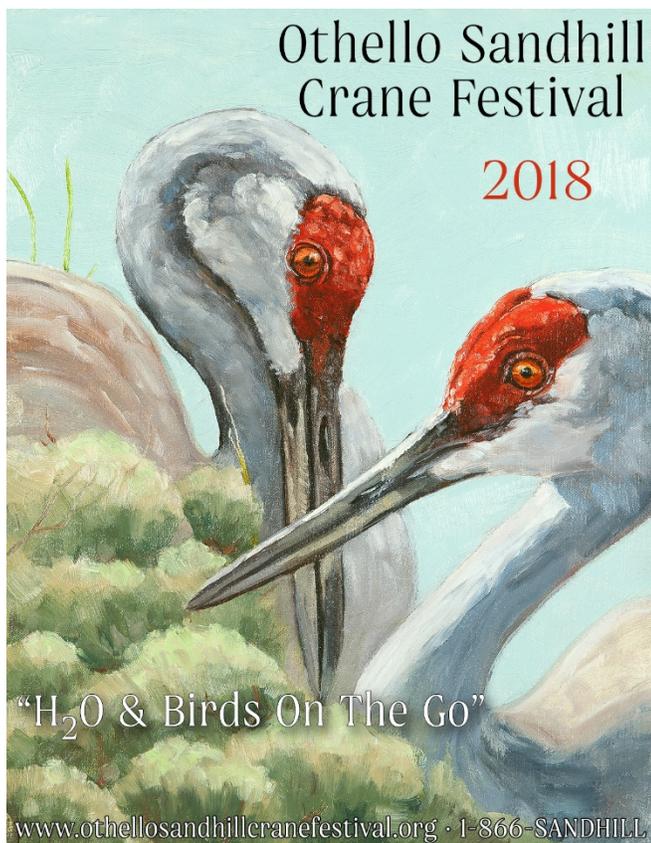
This year’s keynote speaker is truly unique. Stefan Schlick, representing the Portland Audubon Society, was born and raised in Germany, but relocated to the United States in 1992. Over the last 25 years, he has ‘birded’ extensively throughout Europe and North America. His Saturday evening lecture will explain why cranes have been fascinating people all over the world for centuries.

The U.S. Fish and Wildlife Service is a proud partner of the Othello Sandhill Crane

Festival, and Columbia National Wildlife Refuge will be the destination for most of the tours. However, Denise McInturff, a Visitor Services Specialist with the agency, noted, "Columbia is a special place any time of the year, and we hope people will visit the refuge not just during the Festival."

For more information on the Festival, visit www.othellosandhillcranefestival.org or call 866-SANDHILL (866-726-3445).

<https://www.othellosandhillcranefestival.org/single-post/2018/01/11/Othello-Sandhill-Crane-Festival-Set>
<http://sandhillcranefestival.org/>



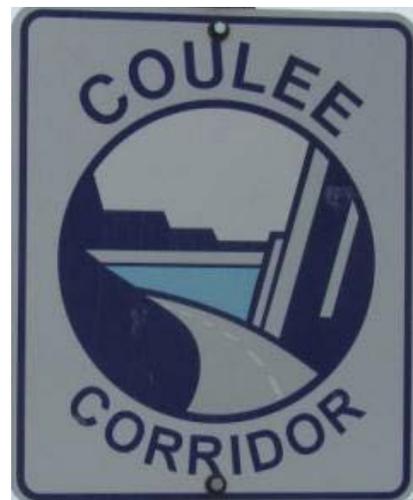
CCC Kiosk Project Progresses

A National Scenic Byways grant is helping the Coulee Corridor Consortium reach its goal of installing community kiosks in five towns along a portion of the 150 mile long Coulee Corridor National Scenic Byway between Omak and Othello.

Five towns are participating in this process. Each town is preparing original content that highlights features of their respective communities.

Towns represented include Othello, Warden, Soap Lake, Coulee City, and Grand Coulee. Content has been completed and graphic art work done. The Gray and Osborne firm is in charge of engineering plans. Kiosk construction is expected to begin later this spring or summer.

In addition, new Coulee Corridor road signs will be installed on SR155 between Omak and Coulee Dam, on the Ephrata Loop on SR28 & SR281, and farther south on the SR262 spur. Another grant component is to update the Coulee Corridor traveling display panels with new materials.



Baldwin Ranch at Steamboat Rock

By Birdie Hensley ¹



Baldwin Ranch lay at the foot of Steamboat Rock

The George Baldwin family lived in the Steamboat Rock area in the early 1900's. One of their first ranches was named the Coulee Live Stock Company aka the Steamboat Rock Stock Company. The ranch laid near Devils Lake, a lake about one mile long, half mile wide and 100 feet deep.

The soil was very deep and the high surrounding rock walls of the Grand Coulee modified the climate so that the growing season was often 30 days earlier than the surrounding uplands. An irrigated orchard yielded quality fruits while vegetables, grain and alfalfa were also grown.

The ranch buildings included a dairy barn, with 50 milk cows, a tractor barn, an ice house, root cellars and chicken coops. Devils Lake was a convenient source of ice that was much needed during the long hot summers. Alfalfa was fed to the ranches Jersey herd and the cream was shipped direct to Seattle and Spokane.

During the days of the Coulee Live Stock Company Steamboat Rock, which towered about 1400 feet above the ranch, was nothing more than a landlocked mesa. In 1912 a fire came through the Coulee and burned the ranch dwellings. After the fire George Baldwin and family moved to a location near the mouth of Northrup Canyon.

Also, in 1912 a party of forty European Geographical Association members and 30 American Professors, on a transcontinental excursion with the American Geographical Society, visited the region. From the train in Almira, the group drove to the mouth of the Grand Coulee via the old stage road, making frequent stops on the way to examine the soil, crop conditions, and harvesting equipment. The group stopped at the Baldwin ranch where lunch was provided



with all products grown on the ranch

Baldwin sold out in 1917 and left the

Coulee. The brand was changed to Bar Eleven and the ranch became diversified with hog production later changing later to sheep raising. A manager's house was added, landscaping with ornamental trees along with an extensive vegetable garden. Lambing sheds, cattle corrals, and bunkhouses for the men were fixed up. The main building even included a walled in refrigerator for keeping meat on hand.

Water for the ranch was piped from Ghent Springs about two miles away at the foot of the Okanogan Trail. The Bureau of Reclamation bought the ranch in 1942 for Banks Lake and most of it is under water today.

This information and much more can be viewed at the Coulee Pioneer Museum, Electric City, Washington. The museum is open by appointment only. Contact Birdie Hensley, (509) 631-0303

¹ This information was compiled from the book, From Pioneers to Power: Historical Sketches of the Grand Coulee Dam area: a project of the Bicentennial Association, 1976.



Othello's Old Hotel

By Barb Caylor

The Old Hotel Art Gallery has lots of events coming up. There is an artist of the month and Saturday, March 24 is Whiskey and Wine Tasting with Local Food Sampling from 2-6 pm. This happens at the same time as the Othello Sandhill Crane Festival which occurs between March 23-25, 2018

As always, the Old Hotel is open free to the public. Hours of operation are 10am-5pm, Tuesday–Saturday. The Old Hotel is located at 23 Larch St, Othello.

Othello Community Museum

By Barb Caylor

The Othello Community Museum is open on Saturdays from 1-5pm starting in mid-June. There is a program at the opening that focuses on special groups around Othello (firefighters, police officers, etc.). This year's opening program will be about the Medical Profession. The museum has had a lot of improvements done to her so if you haven't been by this year put her on your to do list. There are displays about irrigation and the Columbia Basin Project, homesteaders around the area, an old school room, old farming tools inside and old farming equipment outside, an amazing bird display, a historical kitchen, and the Milwaukee Railroad display. The museum is open during the Sandhill Crane Festival March 23-25, 2018 from 10am-5pm. Come by and visit. You will be glad you did! During the off season, you can still visit the museum by calling one of the numbers listed on the signs outside. The museum is located at Third and Larch, Othello.



The Community Museum is housed in Othello's oldest standing church, the First Presbyterian Church built in 1908.

Both Othello pictures provided by Barb Caylor.

Selected Events & Activities

Dry Falls Interpretive Center opens March 1 through October 31, 2018.

Coulee Corridor Consortium Adopt-A-Highway Trash Pick Up, Saturday April 20, 2018 at the Lake Lenore parking lot, 9 AM. Bags, hard hats, vests, and refreshments provided. Bring gloves and sturdy shoes.

Fourth Annual Columbia Basin Eco-Gardening Symposium, April 21, 2018, Technical Skills Center, 900 E. Yonezawa Blvd, Moses Lake, 9-1PM. Free.

Triple Fish Tournament, Coulee Playland Resort, Electric City, April 21, 2018.

Moses Lake Farmers Market, McCosh Park, Saturdays, May-October 8-1 PM.

Colorama Festival - Grand Coulee Dam Area, May 11-13, 2018

Koulee Cruisers Car Show, Kids Fest, and Lions BBQ, North Dam Park, Grand Coulee, June 15-16, 2018

Flood Fest at Dry Falls, Saturday, June 16, 2018. The program includes distinguished speakers on geology, geography, and wildlife; exhibits and center dedication. The public is invited to a walk through the shrub-steppe to look at habitat, geology, and other features.

Bureau of Reclamation Festival of America - Park below Visitor Center, Coulee Dam, July 4, 2018

For information on the Grand Coulee- Coulee Dam-Electric City events contact: chamber@grandcouleedam.org or call us at 509.633.3074

Warden Community Days, September 3, 2018 <http://cityofwarden.org/>.

Harvest Fest, North Dam Park, Grand Coulee, September 14-16, 2018

2018 State Parks Free Days

- March 19 — State Park's 105th birthday
- April 14 — Spring day
- April 22 — Earth Day
- June 2 — National Trails Day
- June 9 — National Get Outdoors Day
- June 10 — Fishing Day
- Aug. 25 — National Park Service 102st Birthday
- Sept. 29 — National Public Lands Day
- Nov. 11 — Veterans Day
- Nov. 23 — Autumn day

Chilly New Year's Day Hike

David McWalter, State Parks Dry Fall Interpretive Specialist II, annually leads a New Year's Day Hike beginning at Dry Falls Visitor Center. McWalter explains that it is an opportunity to learn about the local geology, wildlife, and tour the Dry Falls Visitor Center during the off season!

January 1, 2018 was no exception with seven people, including McWalter, and two dogs, participating in the second annual New Year's Day hike. The program began with snacks inside the Dry Falls Interpretive Center. Though it was a clear crisp 19 degrees, the temperature warmed to 24 and, the

group was treated to bald eagles, raccoons, and ravens.



Hardy 2018 NY's Day Hikers from left to right: *Jim and Susan Douglas, Almira; Kathy Sanderlin, Coulee City; Mariah McWalter, Coulee City, and Galen and Pamela Schmidt, Grand Coulee.*

The hike began from the Sun Lakes campground, hiked toward Umatilla Rock around Camp Delaney and along trails and gravel roads. Along the way, folks were treated to discussions of winter wildlife, vegetation fire ecology and ways to stay warm and safe.



Hiking the trail. Both photos by David McWalter

Dry Falls Visitor Center 2018

March 1, 2018 - open 5 days per week with hours 9 AM - 4: 30 PM. Closed Monday-Tuesday

April 16, 2018 - open 7 days per week 9 AM - 5:30 PM.

Mid May 2018 - open 7 days per week 9 AM - 6:30 PM

Typically the visitor center closes at the end of October. There may be limited hours of operation for schools, and special request during the 'off-season', so contact with state parks officials is encouraged to make these arrangements.

Dry Falls Restrooms Vastly Improved

According to David McWalter, Dry Falls Interpretive Specialist, the biggest project this (2018) winter has been the installation of new partitions for the restrooms which is considered a big improvement. In 2017, the park staff installed new, water efficient, touchless toilets and some modern hand dryers which were needed restroom improvements.

Monthly Coulee Corridor Consortium Meeting Schedule

March 16, 2018 - Othello Senior Center

April 20, 2018 - Grand Coulee

May 18, 2018 - Coulee City

June 15, 2018 - Ephrata

July 20, 2018 - Omak/Nespelem

August 17, 2018 - Soap Lake

September 21, 2018 - Mardon Resort

October 19, 2018 - Connell

November 16, 2018 - Moses Lake

December 21, 2018 - Ephrata

The public is invited to attend any of these Friday lunch time events to find out what is happening and to participate in events and activities.

Editor's Note: Coulee Corridor Consortium Meetings are held monthly throughout the Region

Coulee Corridor Consortium Officers

Tim Alling, Chair

Mark Amara, 1st Vice Chair

Ken Caylor, 2nd Vice Chair

Secretary - Vacant

Barb Caylor, Treasurer

Contact the Coulee Corridor at www.couleecorridor.com OR, Call (509) 634-1608

Cut here and return with your membership materials

The Coulee Corridor Consortium (CCC) wants your help and asks that people consider becoming 2018 members of the organization. The CCC is a 501 (C) (3) non-profit organization with tax exempt status. Benefits of organizational membership include: supporting the Coulee Corridor Consortium, keeping abreast of and participating in new activities and events sponsored by the Consortium along the Coulee Corridor National Scenic Byway, opportunity to help leadership by focusing positive attention on the corridor, be placed on mailing list for the occasionally produced newsletter, and receiving increased member visibility as a listing on the Coulee Corridor website.

☐ \$25.00 Individual Membership Fee

☐ \$40.00 Family Membership Fee

☐ \$75.00 Business, Non-Profit, or Other Membership Fee

☐ \$15 Senior Citizen

☐ \$5 Ages 6-18 or student

Name: _____

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Email: _____

Web page listing: _____

Send applications and checks to Coulee Corridor Consortium, PO Box 123 Grand Coulee, WA 99133