

**Testimony of Andy Cotugno, Senior Policy Advisor
In Support of Willamette Falls Locks Funding Proposal
Joint Ways and Means Subcommittee on Capital
Construction, February 12, 2016**



Co-Chairs Girod and Read and Members of the Committee:

As you know, Metro is the regional government for the Portland metropolitan area. We are a partner with the coalition seeking to have the Willamette Falls Locks repaired and reopened to marine traffic.

I am here to provide you with a support letter from Metro Council President Tom Hughes regarding a funding request. The process to examine whether and how to repair and reopen the Locks is progressing nicely with the State Task Force called for by the 2015 Legislature under way, chaired by Governor Barbara Roberts. In addition, the US Army Corps of Engineers is ready to start their Final Disposition Study, with the startup funding included in the President's FY 2017 budget released just a few days ago.

The importance of the funding request is to fully establish and document the economic, historic, cultural and recreational benefits of reopening the Locks to inform the decision on whether and how to proceed. Historically, the Locks were important to support movement of agricultural and timber products from the Willamette Valley to global markets. These are the types of national economic benefits that the Corps is interested in but this market for movements through the Locks is no longer viable. In today's world, the Locks need to be repurposed to support historic and cultural tourism and recreation. The first request is to help fund an expanded economic benefits study to establish that case.

The second request is to support an interim repair and seasonal operations to allow the Locks to be reopened while the Corps Disposition Study process is under way. Through an interim operation, actual use can be demonstrated to build the business case that a new market for use of the Locks can be established.

Thank you for support of this request.



METRO COUNCIL PRESIDENT TOM HUGHES

February 12, 2016

Sen. Fred Girod, Co-Chair
Rep. Tobias Read, Co-Chair
Joint Ways and Means Subcommittee on Capital Construction
Oregon State Capitol
Salem, OR 97301

Co-Chairs Girod and Read and Members of the Subcommittee:

The Metro Council urges your support for the Willamette Falls Locks Funding Proposal under consideration this 2016 Legislative Session. The repair and reopening of the Locks is of vital importance to the future of our region and State.

The Locks were built in 1873 with approximately one-third of the construction cost (\$200,000) provided by a subsidy to the Willamette Locks and Canal Company from the Oregon Legislature. In 1909, the Oregon Legislature approved \$300,000 to match federal funds, in addition to \$475,000 from the U.S. Army Corps of Engineers (USACE), to support the purchase and upgrading of the Locks by the USACE to allow toll-free passage. In short, the state has been a significant partner for the Locks since their inception. After 138 years of operations, river traffic through the Locks ceased in 2011 when the Locks were placed in "non-operational status" or closed by the USACE. Our Willamette River was effectively cut in two.

This funding proposal would provide funding to remedy this closure by supporting an economic benefits study to demonstrate the local and regional economic significance of the Locks to supplement an economic impact analysis by the USACE. The USACE economic impact analysis will focus only on national benefits. The funding proposal will also provide funds for the short-term repairs that are needed to reopen the Locks on an interim basis and two years of seasonal operational funds.

As you know, the repair and reopening of the Willamette Falls Locks is one of three significant projects related to Willamette Falls. Metro appreciates the partnership with Clackamas County and the state on these three projects. The other two projects are the proposed creation of a National Heritage Area centering on the Falls, and the Legacy Project, which will provide public access to the Falls and spur redevelopment of the Blue Heron paper mill site. Together, these three projects create an unparalleled opportunity for a transformation of this area for our historic and cultural

heritage, economic opportunity, and public access to the Willamette River, both from the shore and for commercial and recreational marine navigation.

Thank you for your advocacy and support for the Willamette Falls Locks Funding Proposal.

Sincerely,

A handwritten signature in cursive script that reads "Tom Hughes".

Tom Hughes
Metro Council President

Willamette Falls Navigation Canal and Locks – Proposed State Funding Action

At the request of the Willamette Falls Locks Working Group*

FUNDING REQUEST: This Legislative funding request is to carry out three key steps to facilitate a conclusion on the final disposition of the Willamette Falls Locks.

CONTEXT: THREE Willamette Falls INITIATIVES

A number of public, non-profit and business partners are aggressively working together on three interrelated, synergistic initiatives in the vicinity of Willamette Falls in Clackamas County:

1. **WILLAMETTE FALLS LOCKS:** Repair, reopen and sustained operations of the Willamette Falls Navigation Canal and Locks in West Linn
 - In 2011, the Willamette Falls Navigation Canal and Locks were placed in non-operational status by the US Army Corps of Engineers (USACE) for life-safety reasons due to the inability to inspect encased gudgeon anchors and likely deterioration on Gates 2, 3, and 4 resulting from years of deferred maintenance. With the precipitous drop in commercial traffic through the Locks over the past several decades, the USACE has prioritized limited capital and operating funds to other water resource facilities of greater national significance (like the Columbia River channel deepening and maintenance, and the series of Columbia and Snake River dams and locks). Because of funding constraints and repair needs, the USACE is faced with choices for the final disposition of the Locks. USACE will consider continued deterioration in its non-operational status, complete decommissioning, removal and disposal as surplus property, or repair and reopening with an alternate ownership and financing structure based upon state and local economic benefits in lieu of declining national benefits.
2. **LEGACY PROJECT:** Redevelopment of the former Blue Heron paper mill in Oregon City, commonly known as the Legacy Project
 - The Legacy Project was purchased from Blue Heron through the bankruptcy court and has an adopted master plan by the City of Oregon City with approved zoning and other entitlements. It is now going through a more detailed development and design process for the private development and associated public infrastructure, including a Riverwalk providing public access to the Falls for the first time in 150 years.
3. **STATE & NATIONAL HERITAGE AREAS:** Establishment of State and National Willamette Falls Heritage Areas encompassing the end of the Oregon Trail, Willamette Falls, historic sites down river to Lake Oswego, and points up river to Mission Bottom, Champoeg State Park, and the surrounding French Prairie community.
 - The Willamette Falls Heritage Area Coalition is comprised of stakeholders dedicated to forming State and National Heritage Areas to further historic preservation and interpretation, and maintain operational function and marketing of the area. The Coalition is governed by a broad-based Board of Directors consisting of over 20 elected officials, and community and heritage organization leaders. A National Heritage Area Advisory Council has been established with community and heritage representatives from the communities within the proposed National Heritage Area.
 - In 2015, the Oregon Parks and Recreation Commission granted State Heritage Area designation, and a required feasibility study will be submitted to the National Park Service for Congressional authorization of the National designation.

The Mission of the Willamette Falls Locks Working Group is to lead efforts with the United States Army Corps of Engineers to repair and reopen the Locks to full operational status for river travel. **Membership: Clackamas County, Portland General Electric, Metro, Cities of West Linn, Milwaukie, Oregon City, Wilsonville, One Willamette River Coalition, National Trust for Historic Preservation, Wilsonville Concrete, eNRG Kayaking*

STATUS: Willamette Falls Navigation Canal and Locks

CORPS' DUE-DILIGENCE ACTIONS: Thanks to sustained and growing advocacy, the Corps of Engineers (USACE) and numerous stakeholders are now completing a Memorandum of Agreement that outlines the due-diligence actions the Corps will take to reach a conclusion on whether to repair or remove the Locks. The USACE is expected to budget funds in FFY 2017 to initiate the following key elements of due diligence:

- a. An updated engineering and technical analysis of the physical condition of the facility to determine immediate and long-term repairs to reopen the Locks and sustain operations in the future;
- b. An economic impact assessment of decommissioning and removal;
- c. An economic opportunities assessment of repair, reopening and sustained operations;
- d. An assessment under the National Environmental Policy Act and National Historic Preservation Act of closure vs. repair options;
- e. An assessment of potential toxic materials;
- f. An assessment of real estate title and boundary issues;
- g. An assessment of seismic issues; and
- h. Definition of continued USACE oversight requirements in the case of transfer to a local government entity.

STATE TASK FORCE: An Oregon Legislative Task Force (SB 131) has been formed to compile information on the historic, cultural and economic significance of the Locks, and examine alternative operating, financing and governance options for the repair and sustained operation of the Locks.

PROPOSED FUNDING REQUEST

This Legislative funding request is to carry out three key steps, proposed below, to facilitate a conclusion on the final disposition of the Locks:

1. **PROPOSAL #1: Economic benefits study** that focuses on state and local benefits to complement the USACE studies described in b. and c. above. The USACE study will primarily focus on national benefits; this study will build upon a 2014 EcoNorthwest study to provide a more detailed analysis of the significance of the Locks and its economic potential to form a basis of comparison of closure against the cost to repair and sustain operations. Because of the interrelated nature of the three initiatives, an economic benefits study will compare and contrast the benefits of the Locks, Legacy Project and Heritage Area individually and as an integrated strategy.
2. **PROPOSAL #2: Stopgap repairs** to reopen the Locks on an interim basis.
3. **PROPOSAL #3: Operate the Locks** for two years on a seasonal basis to develop and demonstrate future use of the Locks.

These proposals are important to inform local, regional, state and federal parties. The information obtained from the study and reopening of the Locks is critical for the parties to reach agreement on the future disposition and roles and responsibilities regarding the Locks.

PROPOSAL #1

A comprehensive economic opportunity analysis of the three Willamette Falls initiatives to quantify the economic benefits of each individually and collectively. The rationale is to describe the potential leverage possible from an integrated strategy as follows:

- For the reopening of the Locks integrated with redevelopment of the Legacy project thereby increasing water-based commercial travel and tourism; and
- For a Heritage Area to provide historic preservation, cultural education, heritage tourism, and marketing with the centerpiece being a redeveloped Legacy site and a reopened Locks.
- Contrast this with a Legacy project without the Locks, a Locks reopening without the added benefit of the Legacy project, and marketing a Heritage area with neither assets.

The study would also identify possible businesses upriver that could access the Locks and coordinate with the USACE Study in quantifying the magnitude of those economic benefits. Finally, the study would develop recommendations for implementation with a correlating action plan.

Scope of Work for Proposal #1 for Each of Three Initiatives

Proposal #1 - LOCKS Analyses

- Documentation of the negative economic consequence of permanent closure of the Locks, including the cost of decommissioning and removal and the added economic hardship on businesses.
- Delineation of traditional marine transportation competitive advantage based upon the cost, fuel consumption and emissions per ton to move bulk goods and containerized goods.
- Identification of the business sectors that could benefit from lower cost marine transportation, such as garbage waste and gravel, scrap steel, pulp and paper, timber, agricultural products such as export hay, grains, hazelnuts and Christmas trees, passage of boats down river to dry dock, passage of marine construction equipment upriver for construction projects, etc.
- Mapping and consultation with businesses that could potentially benefit from lower cost marine transportation and delineation of actions needed to develop the market.
- Delineation of non-traditional businesses that could benefit from access to the Locks especially related to active recreation and historic, cultural and agri-tourism.
- Delineation of social and cultural benefits derived by access to the Locks, including support of traditional Native American customs and public access to the site of the Locks and Locks Museum for historic interpretation.
- Assessment of possible use of the Locks for transport of goods in the event a major seismic event renders the highways and airports inoperable.
- Assessment of the multiplier effect of reopening the Locks as a stand-alone action vs. as an integrated strategy with the Legacy project redevelopment and the added value of interpretation and marketing by the Heritage Area.
- Quantification of the economic value of benefits, including the direct cost benefit for traditional businesses benefitting from lower cost marine transportation, the value to the economy of tourist spending that might be generated by the Locks, the monetized value of historic and cultural benefits and the indirect multiplier benefit to the local and regional economy.

Proposal #1 – LEGACY Analysis

- Identification of job creation potential on the Legacy site based upon a range of possible site development square footage and the targeted industries in the Clackamas County economic development strategy, including data processing, motion picture and video, software, consulting services and environmental services.
- Identification of potential retail development and tourism related site development square footage, including retail stores, restaurants, hotels, museums, etc.
- Identification of potential whitewater rafting, kayaking and water sports competition on site.
- Identification of potential residential and mixed use development.
- Quantification of potential direct, indirect and induced benefits of a range of development with and without the reopening of the Locks and with and without the added value of historical and cultural interpretation and marketing of the Heritage Area. This will include direct and indirect job creation, impact on property values and tax collection and quantification of user benefits of the redeveloped site.

Proposal #1 – HERITAGE AREA Analysis

The Willamette Falls National Heritage Area, proposed for establishment under the National Park Service Heritage Area Program, stretches along the Oregon Trail to the east, and from Lake Oswego and Clackamette Park on the north, to Mission Bottom, Champoeg and the surrounding French Prairie community southwest along the river, with Willamette Falls at its center. The objective of the Heritage Area is to preserve historical resources while providing integrated historical and cultural interpretation for the area, and a marketing strategy aimed at increasing local, regional and national tourism. The economic benefits of tourism will radiate out from Willamette Falls to the up and downriver communities along the Willamette River by encouraging overnight lodging, attendance at cultural and heritage visitor attractions, outdoor recreation, agri-tourism, culinary and wine tourism.

The rich history of Willamette Falls makes it a natural starting place for visitors. Many aspects for development come from this area, including the major gathering place for Native American tribes; the end of the Oregon Trail; the first west-coast, American-incorporated city; the jump-off point to settlement of the Willamette Valley; and the first industrialization in the West, including the first long-distance transmission of electricity, and much more.

Currently, the Willamette Falls are cut off from public access. This is due to past and present paper manufacturing plants on both sides of the Falls, the dormant, fenced-off Blue Heron paper mill site on the east side, and the closed, "no trespassing" Locks and Canal on the west side. Creating historic and cultural interpretation and national and international marketing will be challenging under present circumstances. In contrast, with a successful redevelopment of the Legacy site into a vibrant destination comprised of preserved and reused historic structures, offices and light industrial, restaurants, bars and night clubs, hotels and public gathering spaces on the east side and an operating Locks built with a gate design originally created by Leonardo DaVinci on the west side, using the Willamette Falls as the focal point of an interpretative and marketing strategy is to enhance the bountiful possibilities for the tourism economy of region and the communities all along the Willamette River.

Proposal #1: Potential New Business Developments, such as:

- Heritage, cultural, eco- and agri-tourism and recreational travel up and down river with daytime or overnight stops at restaurants, hotels, bed & breakfasts, and retail establishments on the Legacy site and throughout the communities of the National Heritage Area.
- Heritage, wine and culinary tours by boat from Portland to Newberg with local excursions and overnight stays at lodging within the National Heritage Area, including the Legacy site.
- Concessionaire and partner tours and excursions marketed through the Willamette Falls Heritage Area, the Museum of the Oregon Territory in Oregon City, and other partners in cooperation with heritage and visitor services with daytime and overnight stops at restaurants, hotels, B&B's and retail establishments on the Legacy site and the Heritage Area communities.
- Bicycle and hiking excursions and organized flotillas along the Willamette River Greenway and throughout the Heritage Area.
- Branding of locally-representative merchandise, handcrafts and artwork for sale in the region.
- Expansion of farmers' markets and creation of a food hub to support local farm-to-table and broader agriculture distribution.
- Support existing and develop new heritage, art, food and other community festivals that support local and partner efforts and economies.
- Support and showcase existing local businesses and industry and partner with recognized Main Streets throughout the Heritage Area.
- Enhance existing and support development of new recreational and leisure activities such as geocaching, golf, disc golf, camping, paddling, fishing and more.
- Development of the upriver Port in Wilsonville providing public access from the Willamette Valley for the movement of commodities, water-borne industry, and passengers, in addition to tourist, paddler and bicycle access.

Proposal #1: Resources

Establishing the economic, cultural and historic benefits of the three initiatives will be informed by a significant body of previously developed research and reports. With this very strong starting place and in coordination with the studies intended to be undertaken by the USACE, there will be a wealth of information upon which to base investment decisions. Continued analysis will build upon previous work to ensure a consistent approach for measuring benefits using the most up to date conditions, and accounting for the impact of the individual initiatives vs. the leverage that will be realized from the integration of the three different initiatives.

Reports to incorporate include:

- March 2005: *Willamette Falls Locks Economic Impact Analysis* prepared for Clackamas County Tourism Development Council and Oregon Tourism Commission
- October 2008: *The Willamette Falls Locks: A Case Study Analysis of Potential Transfer Issues* prepared by CEDER for One Willamette River Coalition
- July 2011: *Reclaim Our River: Environmental and Economic Opportunities of Port Development on the Upper Willamette River* prepared by Michael Bernert, Department of Civil and Environmental Engineering at Duke University
- September 2012: *Catalytic Value of the Willamette Falls (Legacy) Project* prepared for Metro, Oregon City, Clackamas County and Oregon State Parks

- September 2014: *Willamette Falls Economic Potential Report* prepared for the One Willamette River Coalition
- March 2015: *Willamette Falls State Heritage Area Application*, prepared by Willamette Falls Heritage Area Coalition, approved by Oregon Heritage Commission, April 2015
- April 2015: *Willamette Falls Whitewater Park – Site Visit and Conceptual Design Report* prepared for We Love Clean Rivers Inc.
- April 2015: *Willamette Falls Whitewater Park – A Prospective Economic Analysis*
- December 2015: *Willamette Falls National Heritage Area Feasibility Study (Draft)* prepared by the Willamette Falls Heritage Area Coalition for submission to the National Park Service

PROPOSAL #2

Interim repairs to gudgeon anchors sufficient to reopen the Locks.

The repairs should be limited to the minimum required to meet safety standards and allow for interim reopening of the Locks while a comprehensive assessment is completed through the Corps Disposition Study and the State Task Force to determine the long-term future of the Locks. Through that process, future repairs over time will be defined and weighed against the value of benefits from reopening vs. economic impact of permanent closure. While these processes are underway, interim repairs would allow the Locks to be reopened to provide real-time experience developing new markets benefitting from the permanent repair and reopening of the Locks.

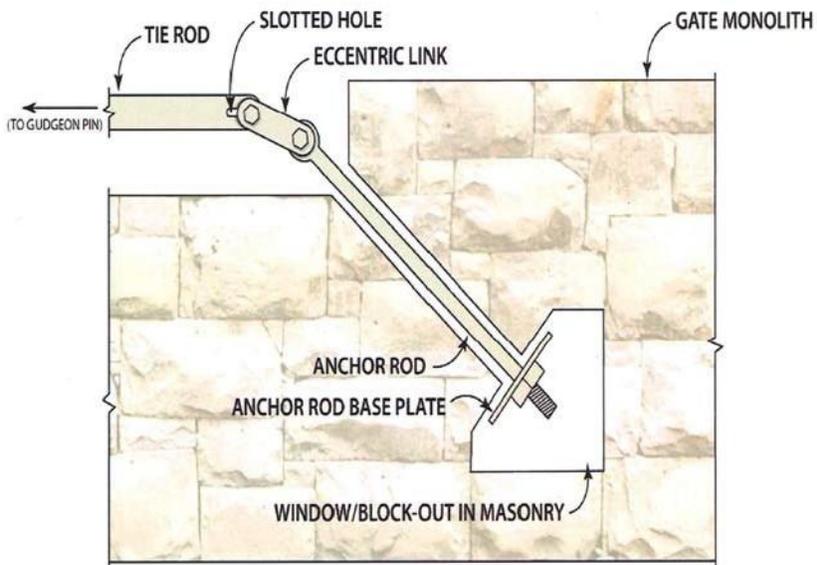
What are gudgeon anchors and why do they need to be repaired?

The gates for each of the seven locks are designed to pivot, allowing vessels to pass from one section to the next. The large pin that the gate pivots on is called a gudgeon pin (functioning much like a hinge). The gudgeon anchors are steel rods anchoring the top of the gudgeon pin to the adjacent lock foundation holding the gudgeon pin in a vertical position while it pivots to an open or closed position. Each of the seven lock gates have two gudgeon pins allowing the double gates to swing from a center closed position to a side open position. The gudgeon anchors in certain cases are surface mounted and accessible for periodic inspections while others are buried in stonework and not accessible for inspection.

The degree of corrosion on the surface mounted gudgeon anchors result in concern by the Corps that the embedded gudgeon anchors are as badly corroded or worse. Without the ability to access the embedded gudgeon anchors, the Corps closed the Locks for life-safety reasons. If a gudgeon anchor were to fail during an opening or closing, it could cause the gates to fall into the lock, putting a vessel passing through the Locks at risk. While the surface mounted gudgeon arms are accessible and easily replaced, the embedded gudgeon anchors are not, representing a more significant repair.



Severely corroded surface-mounted gudgeon anchor.



Embedded-in-stone gudgeon anchor.

Proposal #2 Scope of Work

Based upon past engineering evaluations of the Locks, the key focus of needed repair is the gudgeon anchors. Of the seven sets of gates, there is a mixture of gudgeon anchors that are surface mounted and accessible for inspection and others that are anchored inside a stone structure. The anchor gudgeons that are inside the stone structure have not been inspected and due to corrosion of the anchors that can be inspected cause concern of potential failure. The exposed gudgeon anchors have been inspected and pass current safety requirements and need no repairs. A repair approach would be to design and construct large mass secure anchoring systems and surface mount the gudgeons that are currently anchored inside stone structures. According to contacts at Marine Industrial Construction LLC (www.marineindust.com) the estimated cost of this repair is \$452,400. The repair would be consistent with the other gates that have been upgraded on the gudgeon anchoring system. An outline of the proposed gudgeon work effort is below.

1. Mutually agreed design for surfacing mounting the recessed gudgeon anchors system for 3 gate sets with 6 anchoring site.
2. Shore up the lock gate system to design requirements for construction on the gudgeons anchoring systems.
3. Remove the existing anchor systems per site, one side at a time.
 - a. Retain historic inoperative gudgeon anchor in-situ or at Locks Museum for interpretive display
4. Construct the retaining large mass anchor system per site.
5. Install new gudgeon systems.
6. Move to other side of gate set.
7. Repeat steps 3, 4 and 5.
8. Load-test anchoring systems.
9. Remove shoring for gates.
10. Functional testing of gates.
11. Move to next gate set repeat steps 2 through step 10.
12. Move to last gate set and repeat steps 2 through 10.
13. Test entire systems of gates.
14. De-mobilize from sites.

In addition to the gudgeon anchors, seepage of water through the walls of the Locks needs to be contained. The seepage on the USACE side is into the ground causing subsidence. This seepage is being mitigated during the current closure by de-watering the leaking Lock. If the Locks are reopened, water seepage would again be problematic. Repair of the leaks could be accomplished at an estimated cost of \$39,200.

Proposal #3

Two years of seasonal operations upon repair and reopening to develop and demonstrate future use of the Locks.

Once the Locks have been repaired, funding for two years of seasonal operations is proposed to serve as a pilot for development of longer term prospects. This would allow both recreation and commercial traffic to navigate the Locks and provide the opportunity to demonstrate their economic and social benefit. At the conclusion of this test period and based upon the results of the USACE Final Disposition Study, a permanent decision can be implemented to either permanently repair and reopen or permanently close the Locks.

The proposed cost of operations is \$230,000 per year for two years (total \$460,000). This would allow for operations to be tailored to match market demand. One example of seasonal operations could be 18 hours of service five days a week during the peak summer recreation months (Thursday through Monday, June through September) plus two to four regularly scheduled days of operation throughout the rest of the year that commercial operations can rely upon.

Willamette Falls related LEGISLATIVE HISTORY

- \$200,000 was approved by the 1872 Oregon Legislature as a subsidy to the Willamette Locks and Canal Company to provide approximately one third of the construction cost. The Locks opened as a private business charging tolls for passage in 1873.
- \$300,000 was approved by the 1909 Oregon Legislature to match the Corps of Engineers \$300,000 for repairs and deepening of the Locks, in addition to the Corps \$375,000 to purchase the Locks from the Portland Railway, Light and Power Company to allow toll-free passage through the Locks.
- Oregon Parks & Recreation and Oregon Marine Board provided partial funding for a Locks' engineering study in 2007.
- Funds for seasonal operations and minor repairs of the Locks in 2007, in addition to USACE caretaker funds, totaled USACE (\$57,000), ODOT (\$39,410) & Clackamas County (\$26,500), and Federal Transportation Enhancement Program (up to \$156,500).
- In 2009, the Locks received \$1.8 million in ARRA funds plus \$269,000 in funding from USACE (\$511,000) and ODOT (\$118,000) for Hydraulic and Steel Structures Inspection and gate repairs.
- \$12.5 million in appropriations approved by the 2013 and 2015 Oregon Legislature to provide a share of the funding for public access to Willamette Falls on the Legacy site (former Blue Heron Paper mill).
- SJM 10 adopted by the 2015 Oregon Legislature supporting federal legislation to establish a National Heritage Area, repair and reopening of the Willamette Locks, and redevelopment and revitalization of the Legacy site and others to create an historic, cultural, educational and economic asset.
- SB 131 establishing a Task Force to compile information about the historic, cultural, economic, recreation, transportation, emergency planning benefits of the Locks and to evaluate alternative governance and funding mechanisms for the repair, reopening and sustained operation of the Locks.

Combined Proposals - COST AND BUDGET

	Description	Cash Contribution	In-Kind Contribution	USACE Funding	Legislative Request	Total
USACE Final Disposition Study	Final Disposition Report			\$590,000		\$590,000
Proposal 1	Economic Opportunity Analysis	\$100,000			\$100,000	\$200,000
Proposal 2A	Gudgeon Anchor Repair		\$92,400		\$360,000	\$452,400
Proposal 2B	Seepage Repair		\$9,200		\$30,000	\$39,200
Proposal 3	2-year Seasonal Operations	\$230,000			\$230,000	\$460,000
TOTAL		\$330,000	\$101,600	\$590,000	\$720,000	\$1,741,600

Supporters

A long list! Including:

- The Willamette Falls Heritage Area Coalition, a twenty member Board of Directors consisting of local elected officials, tourism, heritage and cultural leaders.
- The National Heritage Area Advisory Council to the Willamette Falls Heritage Area Coalition which includes community representatives appointed by the Coalition from the business, environmental, recreational, tourism and culture and heritage organizations in the communities up and down river from the Falls throughout the proposed National Heritage Area.