

COCKREHAM ISLAND BUY-OUT FEASIBILITY STUDY SKAGIT COUNTY, WASHINGTON

EXECUTIVE SUMMARY

The Cockreham Island site is located roughly between the Towns of Lyman and Hamilton in Skagit County, Washington. The site is adjacent to the Skagit River, primarily composed of low lying floodplain, and has a history of flooding and flood related damages. The Cockreham Island Levee was first constructed in the mid-nineteen hundreds by local landowners to provide protection for agricultural lands on the island. While the levee does affect flooding, the island continues to be flooded by flow moving around the levee, spilling over banks to the south, and backwatering up into local slough channels and creeks. Flooding occurs during frequent discharge events, and during infrequent large floods the majority of the island is inundated.

A group of present landowners, that collectively own a large portion of the island, have requested that the county investigate the possibility of a buy-out of the island properties. These landowners have experienced repetitive damages over time that have not been covered by insurance or other relief funds. At this time they desire to relocate from the island.

Cockreham Island is not currently an island in the literal sense in that roads extend onto the island that are accessible except during floods when flood waters cut off access to the island. The dominate river feature in this area is a set of complementary bends (large S-shaped turns) that are being held in place by the Cockreham Island Levee and bank protection placed along the South Skagit Highway. These “training” structures limit channel movement, force the river to travel up the valley grade, and lock the river into this un-natural configuration. During flooding events the river will try to straighten and travel directly down the valley grade. This exerts pressure on the levee and protection along the South Skagit Highway and periodic maintenance has been required to maintain the integrity of these structures.

A benefit cost analysis has established that a buy-out of the Cockreham Island properties is potentially cost-effective. This analysis compared the cost of buying properties on the island to the cost of future flood damages and maintenance of infrastructure. The analysis considered discount rates of both 3.0 percent and 7.0 percent to compute the net present value for future costs and benefits. A discount rate is a means of presenting future value in present dollars. Most Federal programs use the 3.0 rates, while FEMA uses the 7.0 rate. A benefits/cost ratio was calculated using the 3.0 and 7.0 percent rates resulting in benefit to cost ratios of 4.8 and 2.5 respectively. The larger these ratios, the higher the buy-out will be rated when applying for grant funding through Federal programs.

Buy-out of the Cockreham Island parcels will not likely occur from one funding source or through one large scale action. It is more likely that a buy-out would occur using multiple funding sources over an undefined period of time. This suggests that it would be prudent to prioritize parcels for buy-out and develop a plan to acquire parcels over time as funds become available. We recommend the following spatial buy-out prioritization:

1. All properties located south of Snider Road, west of Cockreham Island Road, and south of the Cascade Trail
2. All properties south of Jim’s Slough
3. All properties south of SR 20 that are inundated under 10-year recurrence flow conditions

4. All remaining properties

Prioritizing buy-out within each of these spatial prioritization levels could be done by comparing purchase costs, parcel level benefit-cost ratios, gains in ecological benefit, landowner willingness, flood frequency, or by using a combination of criterion. Approximate costs for purchase of properties within each prioritization area are summarized below.

- Priority Area 1: \$5.7 million
- Priority Area 2: \$2.3 million
- Priority Area 3: \$4.0 million
- Priority Area 4: \$1.8 million

The property cost acquisition estimate is based on the property values published by the Skagit County Assessors' office plus demolition costs. The Assessors' value is often less than market value. To account for this difference we entered into discussions with Assessors' office staff. They recommended that the assessed value be increased by 30% (multiplied by 1.3).

In some cases the assessed value did not include the value of land. This exclusion occurs when a property owner has an exemption from paying taxes (e.g. exemptions are categorized for open space, agricultural, disability or seniors). In these cases, an adjustment was made to include the land market value in the acquisition costs.

Adjusting the assessed value for each parcel as described above resulted in a total acquisition cost of approximately \$12.5 million. In addition to the property acquisition cost of \$12.5 million, demolition costs for removing residences and outbuildings was estimated to be approximately \$1.3 million for Cockreham Island. Therefore, total property acquisition and demolition costs were estimated to be approximately \$13.8 million.

Once sufficient properties have been secured, we recommend that the lower portion of the Cockreham Island Levee be removed. This would allow the river to create a new mainstem channel through the island reducing present risk of levee failure, flood backwatering, and maintenance costs. The levee will need to be removed in phases to allow for the river to adjust incrementally. Determining the extent and timing of feasible levee removal requires further study. It is possible that much of the levee can be removed through time as the river adjusts. However, the levee currently provides valued protection for SR 20 and the Town of Lyman. The river would likely migrate toward and threaten these locations if the levee were removed or failed. Hence, continued protection of SR 20 and the Lyman area will be a requirement of future river management activities for this area. In the meantime, the upper portion of the levee should be closely monitored and maintained to stave off a levee failure event.

Purchasing these properties and sequentially removing the Cockreham Island Levee would result in immediate habitat benefit as well as vast opportunities for future habitat restoration. In addition, the transfer into public lands (coupled with similar public acquisitions upstream and downstream) would provide a large open space for various recreation opportunities related to the river, local fish, fowl, and wildlife, and the Cascade Trail.

Moving forward with a buy-out will require a number of action items to gain additional information, clarify outstanding issues, and establish a formal pathway for landowners. Some

action items may be best completed by Skagit County Public Works, while other tasks will likely require landowner and/or additional stakeholder involvement. Below is a list of potential next steps that could be taken to move the buy-out process forward. This list is presented in no particular order of sequence or importance.

- Investigate current zoning and possible re-zoning to accommodate future land uses, including possible actions to restrict development/new construction
- Adopt the recommended action in this report as Skagit County's vision for future management and discontinue maintaining the lower portion of the levee
- Present Skagit County's vision for future land use on the island to potential funding sources
- Make a formal presentation to those entities controlling mitigation funds for FERC re-licensing of the local dams in hopes that they may get involved in buy-out of Cockreham Island parcels
- Develop buyout priority zones based upon proposed future land use
- Develop a buyout priority list by parcel, based upon the parcel's benefit/cost ratio and location within the buyout priority zones
- Negotiate a mitigation plan with the tribes and other resource managers that will allow some or all of Skagit County's (or other entities) future mitigation to occur in the form of buy-out on the island (This would suggest that the Skagit County purchase the property ranked highest on the priority list. If the mitigation requirement is not enough to purchase that property, those funds would be placed into an account and added to with future mitigation monies until the purchase amount was accrued). This may or may not include deeding these properties to a local non-profit or directly to the tribes
- Establish a formal process for landowners to voluntarily express an interest in being bought out and develop a list of those interested
- Assist individual landowners in developing FEMA grant applications to acquire monies for purchase of their properties
- Establish a floodplain buy-out fund within the county to be used for future purchases on Cockreham Island