

Arch Cape Forest-Watershed



Near and Long Range Planning: Operational Needs and Payment Options

Briefing to Arch Cape Water District Board
by Watershed Finance Committee
October 19, 2023

Committee Membership

Leadership & expertise for the Planning Process has come from the following:

Finance Committee
Rick Gardner
Clark Binkley
Beth Morey
Mike Wodtke
Casey Short
Ben Hayes (Consulting Forester)
Bill Campbell (Board Representative & Facilitator)

Forest Management Committee
Clark Binkley
Pat Noonan
David Dougherty
Mike Ardington
Doug Caffall
Ben Hayes (Consulting Forester)
Bob Cerelli (Board Representative)
Bill Campbell (Facilitator)

Background

- **Forest Purchase:** June 2022
 - 1453 Acres: 750 Acres of Source Water Protection Area (SWPA) and 700 acres outside of the SWPA
 - Price: \$4,710,000
 - Funding: Paid for with Federal Grants and Matching Funds
- **Improvements :** \$1,100,000+ of funded improvements to be made to the Watershed, primarily the roads
 - Scope: Repair, Removal and Decommissioning of roads to eliminate sedimentation into the source drinking water, for fire protection access and for safety
 - Funding: Federal ARPA (COVID) funds, Oregon Clean Drinking Water funds, Hollis funds
 - Expiration Dates: Under Contract by 12-31-2024, Substantially Complete by 09-01-26. Last invoice paid: 12-31-26
 - Use it or Lose it: Any remaining money goes back to Federal Treasury.
- **Ongoing Management and Operations:** *Subject of Today's Discussion*
 - This is the financial responsibility of the Arch Cape Water District
 - There is no previously approved plan for what it will cost or how it will be paid
 - There are currently \$450,000 in contributions, donations and grants



Setting the Stage for Today's Discussion

In July, the Water District Board convened a Watershed Finance Committee to work with them and the community to develop a long range operations and finance plan.

- **What we have learned:**

- Developed a set of assumptions about the operations and administrative work that will be required and its costs.
- Developed assumptions about the cost of consulting forester to provide ongoing management as well as forestry
- Considered logging and rate increases as alternative or blended methods to pay for those costs
- Built a modeling tool to evaluate alternative scenarios / options

- **Unknowns:**

- Allocation of Roads Maintenance Costs, estimated at \$13,000 / yr with inflation: Initial discussions with NCLC per contractual easement recommended. NCLC payment will decrease estimated costs to the District.
- ~~Approach and costs for managing the Watershed: Finance Committee is just beginning to research and evaluate whether to increase district staff, outsource to a forestry company or hire consultant(s). Will increase estimated costs~~

- **The Path Ahead:** Ongoing Discussions with Arch Cape Water District Rate Payers

- Understand preferences for logging or rate increases and set timeframes for decisions
- Formalize a annual budget process to refine financial projections and payment decisions on a year to year basis

Annual Operating Expenses

These estimates are based on assumptions contained in the Appendices. Expenses are likely to change slightly, up or down, as we learn more over time.

OPERATING EXPENSES	Annual Avg.
Insurance	-
ODF Fire Assessment	(2,450)
Property Manager	(5,568)
Consulting Forester (includes Forest Management)	(4,410) (13,642)
Finance & Administration	(5,076)
Legal	(970)
Audit	(2,000)
Update Management Plan (per FLP contract) every 10 years	(1,200)
Road Maintenance	(13,060)
Pre-Commercial Thinning	(254)
Materials - Supplies	(520)
Contingency	TBD
TOTAL EXPENSES	(35,508) (44,740)

Removed project mgmt. line

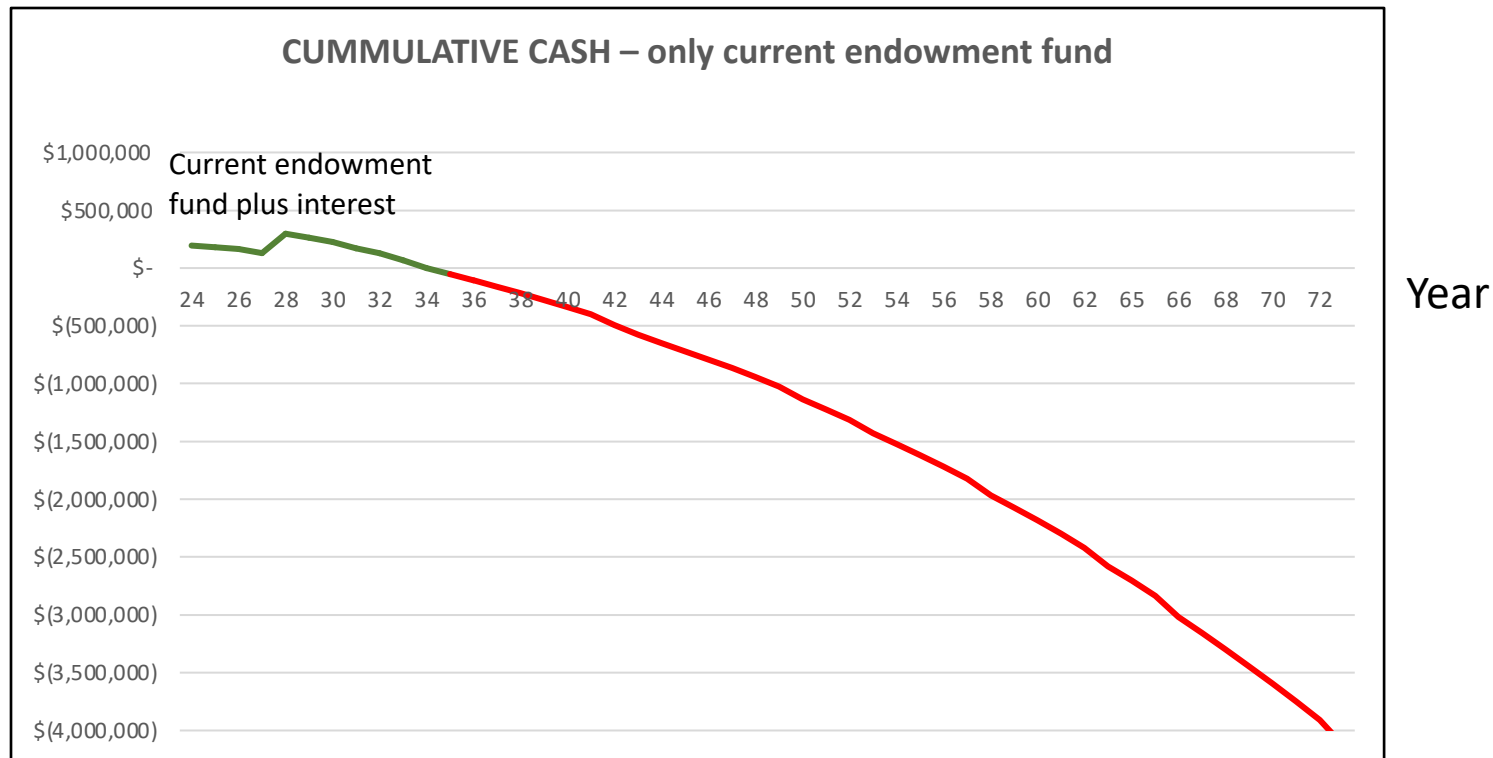
Per the easement, NCLC is responsible for their usage share of these costs. A monitoring/ recording process may need to be put in place.

Average Annual Cost without inflation



Cumulative Operating Cash -Projection If no additional revenue

Without any additional revenue, the \$450,000-ish of current contributions will last until ~~2035~~ 2034. After that, there is likely to be no remaining money to pay for operating costs.



Options for Paying for Operating Costs

Logging, of some intensity, and/or water rate increases are the only viable alternatives for paying for the costs. (Future donations could reduce or eliminate the need for either.)

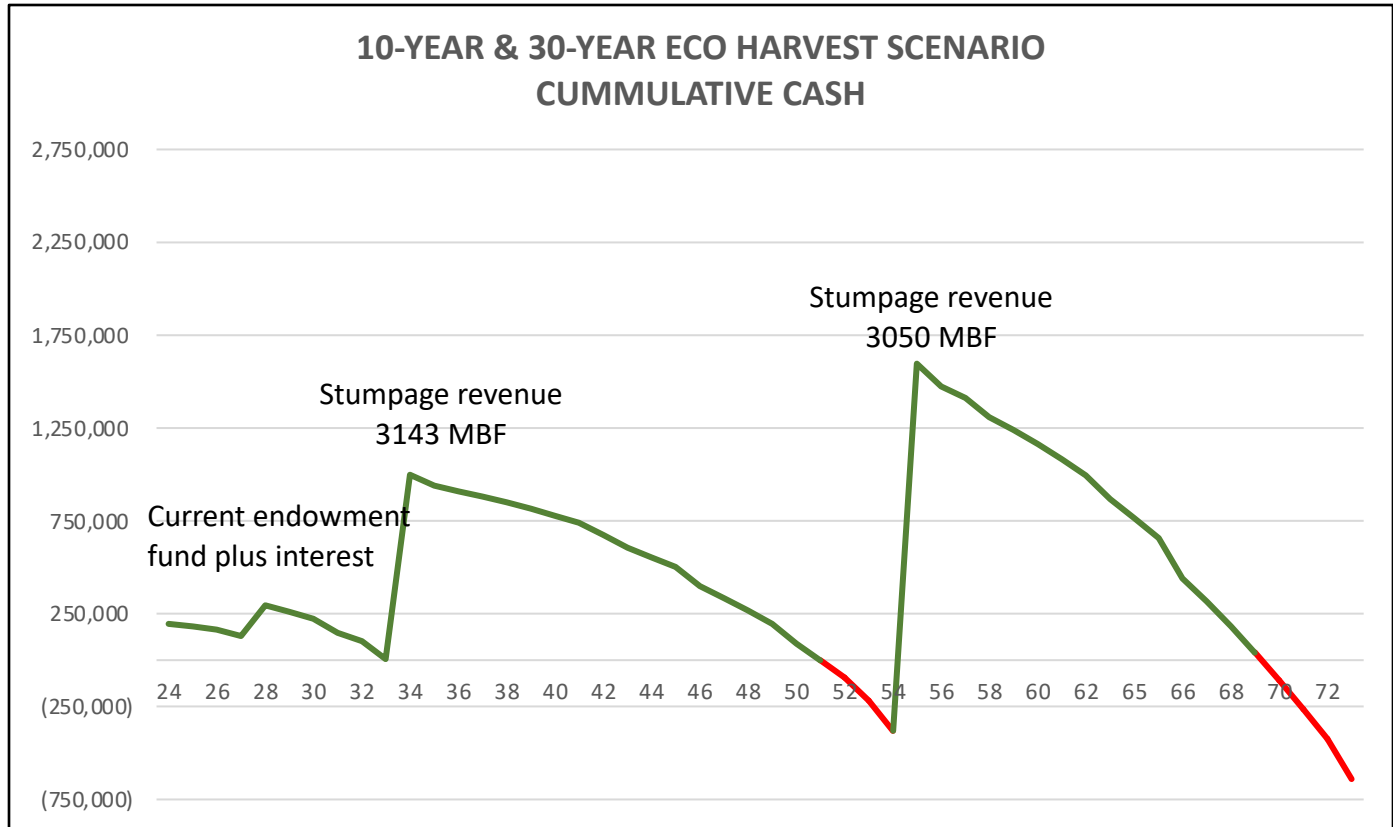
- **Option 1 - Ecological Harvest (Year 10 / Year 30):** Light harvest in years 10 & 30 across the Watershed - **inside and outside** of the source water protection area. Large clumps of trees left across 20-60% of the landscape of varying heights, species, and ages. Some dispersed trees, of particularly windfirm species, are often retained as well.
 - Year 10 – 20% of 97 acres harvested for 3,143 Million Board Feet (MBF)
 - Year 30 – 20% of 67 acres harvested for 3,050 Million Board Feet (MBF)
- **Option 2 - Harvest to pay operating costs: Optimized Harvest (Year 10 & Year 30):** “Clear cut” harvest in years 10 and 30 – **only outside** the source water protection area to maximize revenue
 - Year 10 – 263 acres harvested for 2,644 Million Board Feet (MBF)
 - Year 30 – 149 acres harvested for 4,067 Million Board Feet (MBF)


Note: Timber in these stands is currently of significantly less quality and density than in those stands targeted above. In year 30 there is more mature timber to harvest per acre than there is in Year 10.

- **Option 3 - Raise water rates to pay operating costs:** No harvest projected

Note: Harvest events are not fixed to a specific year - but to a timeframe when logging will be required for financial reasons and when pricing will be optimal

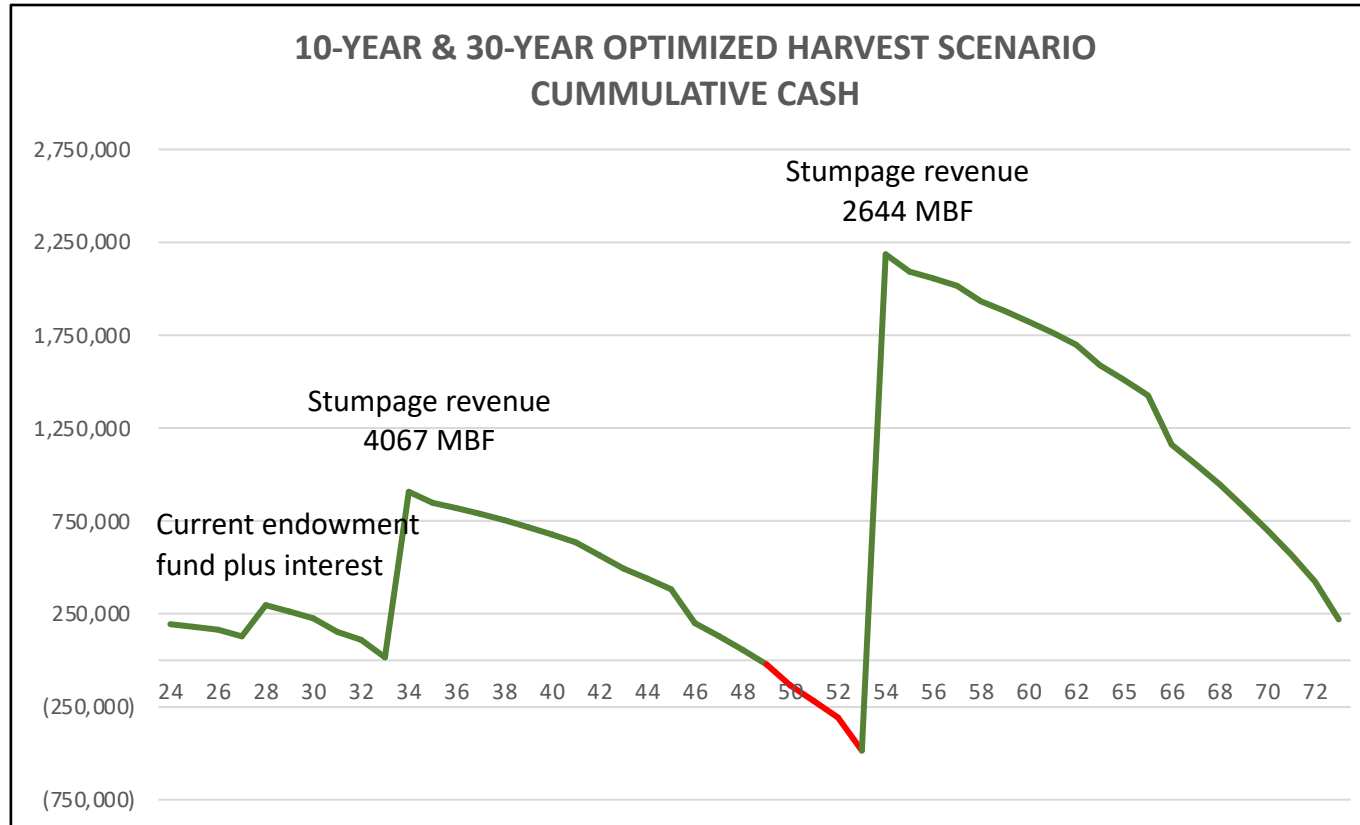
Option 1: Harvest to pay operating costs
Ecological Harvest (Year 10 / Year 30) across Watershed
Cumulative Operating Cash




 - Based on current estimate of operating expenses

Year

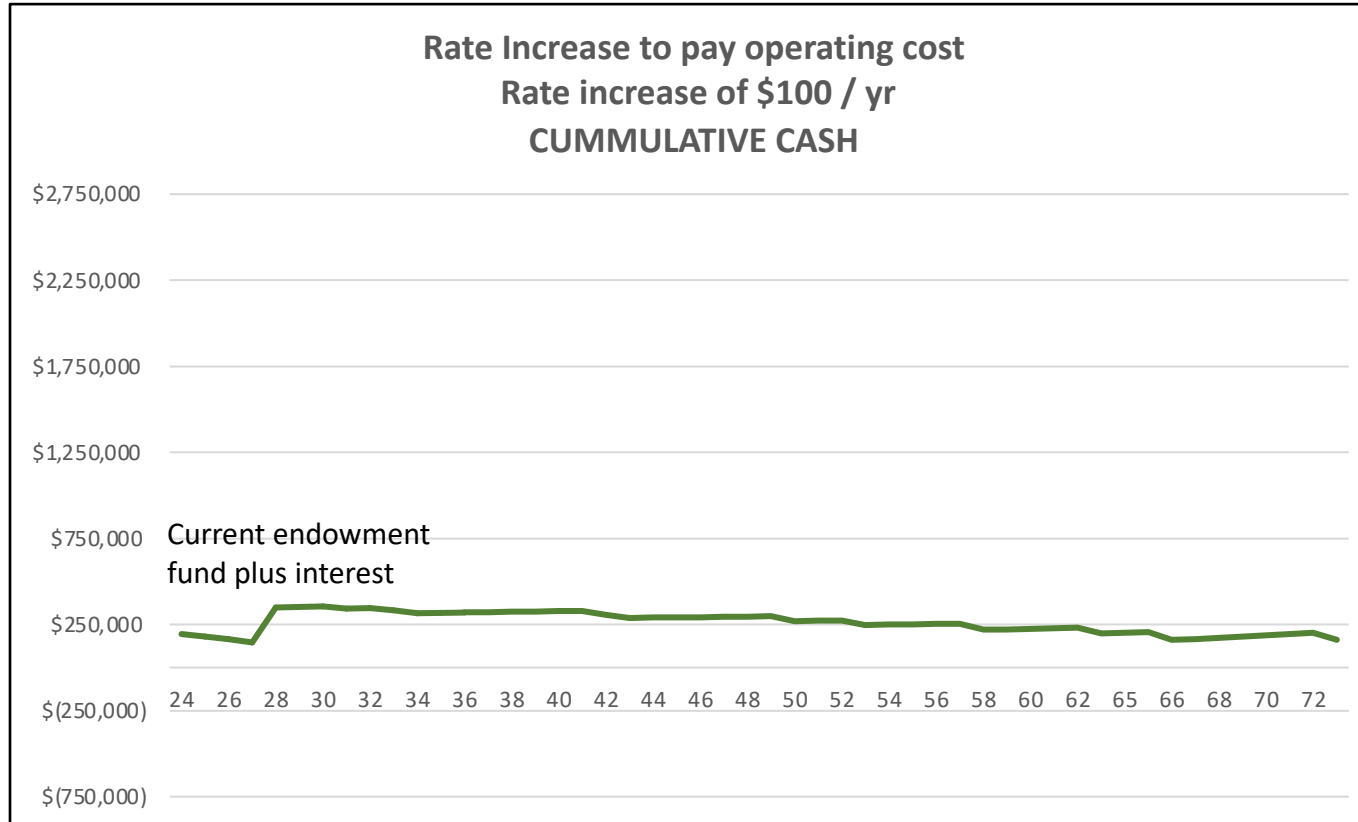
Option 2: Harvest to pay operating costs
Optimized Harvest (Year 10 / Year 30) outside SWPA
Cumulative Operating Cash



 - Based on current estimate of operating expenses

Year

Option 3: Rate Increase to pay operating costs
Rate increase of ~~\$85~~ \$100 / year starting in July 2025
Cummulative Operating Cash



- Based on current estimate of operating expenses
- Rate increases would need **to start in July 2025** to maintain this funding level

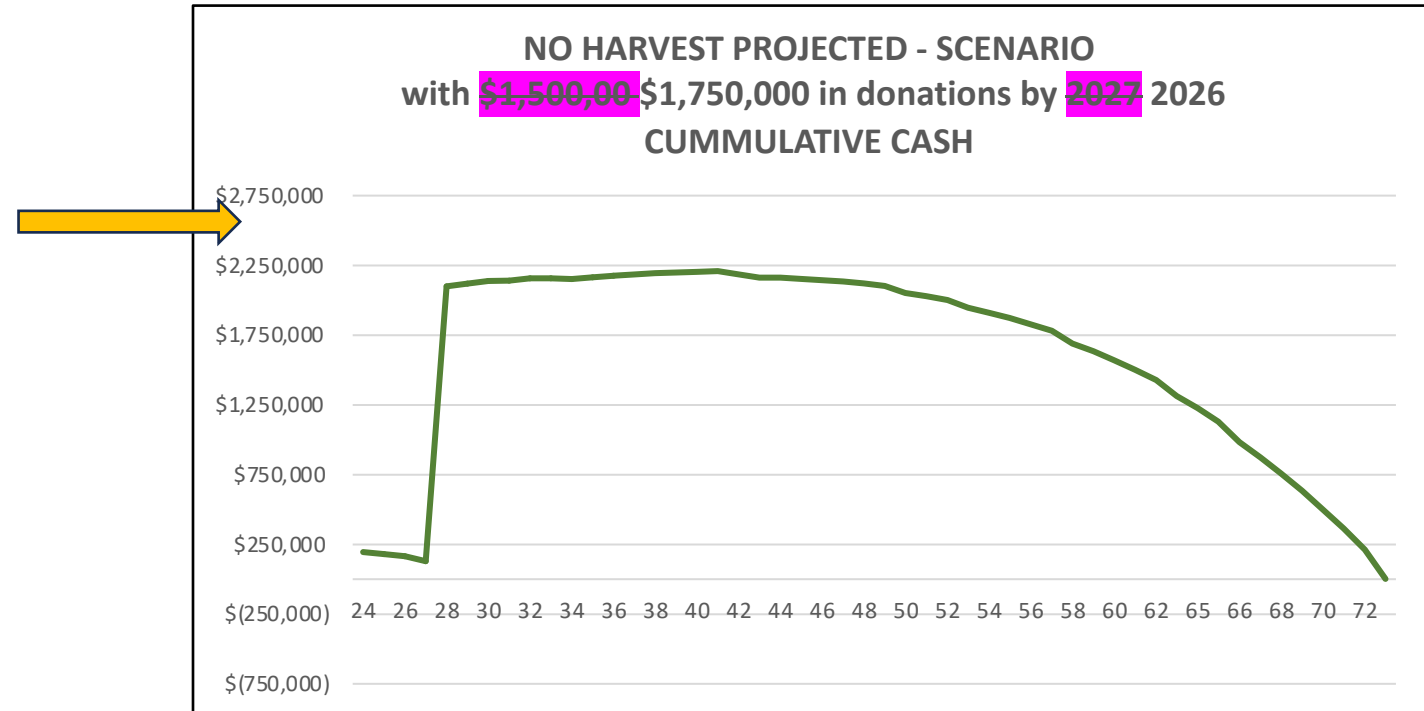
- Rate increases start with 306 hookups (per ACWD long range budget)
- Hookups increase by 2 each year (per ACWD long range budget)
- 3% annual inflation in rate amount

Alternative Revenue Possibilities

Donations: To the extent that donations are received, they push out the need to log / raise rates --- or they could eliminate those needs entirely. **If donations are to be pursued, the Community needs to put a process in place to raise them.**

Grants: It may be possible to get grants, however our general understanding is that grants do not typically cover operating costs. Likely would require some amount of work to be done – like thinning of roads. There would be additional costs to research, apply for and manage grants.

Levys: A levy is an alternative to rate increases, but the effect on rate payers and/or owners will be about the same. If the levy doesn't pass, then rate increases will be required. There are also costs to get a levy on the ballot.



Payment Option Decision Timeframes

- Review and updating of the operations and financial plan needs to be formalized as part of the budget process that happens each spring. Payment Option decision timeframes can be reassessed each year.
- Based upon what is currently known*, payment option decision timeframes are below.
 - **January-February 2025:**

If rate increases are to be the payment method (and no additional donations have been received) a decision needs to be made in 1Q2025 so that rate increase can take effect in July 2025
 - **January ~~2027~~ 2026:**

~~\$1,500,000~~ \$1,750,000 in additional donations need to be received by January ~~2027~~ 2026 to eliminate the future need to logging or rate increases.
 - **January 2030:**

If logging is to be the payment method (and no additional donations have been received) a decision needs to be made in 1Q2030 to begin to evaluate optimal timing for logging event to maximize price.

Appendix

One – Time Projects: Costs & Funding

FUNDING			REMAINING		
ARPA - Unspent / Uncontracted			\$	876,490	
Drinking Water Fund			\$	30,000	
Hollis			\$	15,000	
TOTAL			\$	921,490	
COST ESTIMATES			SPENT	CONTRACT REMAINING	PROJECTED
Project Mgmt	\$	(47,429)	\$	-	\$ (143,253) *
Roads Contract Management					\$ (75,000) *
Finance Mgmt	\$	(6,000)			\$ (21,000)
Construction - Brushing / Main	\$	(22,663)	\$	(61,316)	\$ (26,535) For 2024 & 2025
Construction - 5 projects					\$ (265,577) *
Decommissioning - Red Roads					\$ (184,117) *
Decommissioning - Yellow Roads					\$ (112,766) *
Rock in DWSA					\$ (30,000)
Legal Fees					\$ (7,500)
Forestry Consultant	\$	(55,019)	\$	(42,981)	\$ (10,000)
Land Acquisition	\$	(940,000)			\$ -
Land Maint + Repair (PCT)	\$	(46,549)	\$	(38,679)	\$ -
Conservation Planning	\$	(5,850)			\$ -
TOTAL	\$	(1,123,510)	\$	(142,976)	\$ (875,748)
NET					\$ -
					\$ 45,742

\$75,000 into endowment fund

Review of contracts and easements prior to any road decommissioning taking place.

- Some padding to cover actual costs if greater than expected
- Any excess cannot be applied to operating costs. If we don't use this money, we lose it.



* Pending review of one project with Cannon Beach Fire (substantial change possible) & actual bids from contractors

Ongoing Operations – Forest Management

Cost	Harvest Event Yrs	No Harvest Yrs.	Comment
Property Manager	Harvest – 3 year window (pre, harvest, post) 16 hrs/month @ \$58 / hr	8 hrs / month @ \$58.00 / hr	Assumes District Staff
Consulting Forester	Harvest – 3 year window (pre, harvest, post) 12 16 hrs / month @ \$125 \$145/hr	3 8 hrs / month @ \$125 \$145/ hr	
Replanting Survey	If single harvest, survey 5 years later by Forester: 4 hrs @\$125/hr	N.A.	If multiple harvest, cost included within Forester cost above
Precommercial Thinning	If any harvest anticipated, 112 acres in 2030 – to improve volume growth and windfirmness (resistance to blowing over If ongoing harvest, then 12 years after each harvest. All @ \$240/acre	If no harvest anticipated, 53 acres in 2030 @ \$240/acre - more diverse stands will stratify on their own and would not need PCT (volume growth doesn't matter as much).	There are some acres that are questionable for whether they need PCT- they have high species diversity and will "stratify" on their own eventually.
Inventory / Stands Exam	1 day year/ by included in Consulting Forester cost above.	1 day year/ by included in Consulting Forester cost above.	Walk through stand exam of 50% of the property each year.
FSC Certification	5 years before and 2 yr after. \$2300 yr . (no final decision if will de done)	N.A.	Not required if harvest outside source water protect area
Targeted Invasive Plant Mitigation	\$100 / exposed acre (20% of harvest area)	Tree growth shade will mitigate	no herbicide – manual treatment for slashing.
Brushing and Road Maintenance	\$13,000 yr – (Average cost every 5 years) If heavy scenario (year 10), decommissioning of roads will be done after the harvest with operating funds. (\$184,000)	\$13,000/yr. – (Average cost every 5 years) Decommissioning of roads will be done with ARPA funds	Roads brushed on 5 yr cycle with contingency for failed culverts, slumps, etc. on an annual basis. Years 2023-2025 will be paid with ARPA funds




Ongoing- Operations – Administrative Services

Cost	Average Annual Costs	
Insurance	Included in District Policy	
ODF Fire Assessment	\$ 2,450	
Finance and Management	\$ 9,000 / \$5,400	Harvest Years / Non-Harvest Years
Grant Writer / Manager	TBD	
Legal / Marketing Research for Levy	TBD	
Legal	\$ 1,500 / \$1,000	Harvest Years / Non-Harvest Years
Audit	\$ \$2,000	
Mgmt Plan Updates (per FLP contract)	\$ 12,000 /every 10 yrs	
Signs/ Miscellaneous	\$ \$1,000 in yrs 1&2 the \$500	
Contingency	TBD	
Inflation Rate on Costs	3% (currently 3.18%)	



- Average Cost is per year (unless otherwise indicated) without inflation.

Ongoing Operations - Revenue Options

Revenue Option	Assumption
Current "Endowment" Fund	<ul style="list-style-type: none"> \$400,000-ish from prior donations with \$200,000 required for working capital until 2026. Interest only calculated on \$200,000 until 2026. Hollis Fund Principle of \$75,000 Interest rate of 3%
	DF - \$428.50. GF - \$301.75. RA - \$245. RC - \$1115. SF - \$314.75. SS - \$100. WH - \$339.25
Stumpage Pricing	Assume use these prices and escalate them at 2.8%
Payment from NCLC for Road Usage per Easement	Nothing factored into the model yet 
Harvest Revenue Future Discount Factor	3%
Local Option Levy	TBD
Grants	TBD
Donations	TBD
Rate increases	Included as one of the payment options to follow
Carbon Sequestration	A future consideration (https://landyield.com/)



Explanation of Forest Management Line items Detail



Line Item	Discussion - Detail
Property Manager	Responsibilities: 1) Patrol property 1x per week depending on season. Enforce policy as necessary or call enforcement. 2) 24/7 response to events that might occur. Track who is on the property and where contractors are and monitor them 3) Be the emergency point of contact for fire response and contractors working in the Forest. 4) Manage the keys to the Watershed gates. 5) Determine, in conjunction with the consulting Forester, when the Watershed property should be closed. <i>In harvest years:</i> Same responsibilities, more intensely working with Forester on contracting.
Consulting Forester	Responsibilities: 1) Track operations plan along with issues that arise and make mgmt. recommendations. 2) Advise during annual budget process, 3) Be liaison with ODF and other grantors. 4) on-call" for consultation as needed and periodic visit, if no significant active mgmt. Do stands exam / inventory. Part of this cost is also covered in the mgmt plan updates. <i>During harvest events,</i> Same responsibilities and deal with all contracting / sale of the timber sales, as well as reforestation, pre-commercial thinning, road work, etc.
Replanting Survey	This is a post harvest event: <i>If on-going harvests:</i> There would be a 1 year and a 5 year survey of harvested area to ensure ODF required tree growth. This cost is included as part of the harvest event costs of Consulting Forester. <i>If single 10 yr harvest event:</i> a separate cost as the Forester has no scheduled activities on site.
Inventory / Stands Exam	<i>If single 10 yr harvest event:</i> High accuracy inventory to establish value to stands to be harvested <i>If ongoing harvests:</i> Moderate accuracy inventory to Monitor / Assess growth for future stands to be harvested <i>If no harvest:</i> low accuracy inventory to monitor forest health issues, invasive plants, potential fire issues, habitat metrics, etc. As well as keeping track of inventory in case it becomes absolutely necessary to harvest for operating expenses.
FSC Certification	<i>Rationale for:</i> Provides an independent audit that forest management and logging is done to an accepted high standard (social license). When multiple foresters are involved over time, provides a common understanding of forest management objectives. May open up certain markets, that may be closed to non-certified logging. Certification would be done 5 years before and 2 years after the logging event <i>Rationale against:</i> Since the District will be selling stumpage and not individual logs, certification is not likely to have any appreciable effect on markets. Legislation, practice standards and our management plan already set a high standard for forestry and logging. With a small area to be logged, the necessary level of control can be achieved internally. The District may not want restrictions on the tree stock that can be planted.
Targeted Invasive Plant Mitigation	Harvest events will leave open area in which invasive species can grow as there is plenty of light. In the current harvest plan, 20% of total area to be harvested would be exposed and require invasive species mitigation. A decision about use of herbicide or manual mitigation would need to be made.
Brushing and Road Maintenance	Level of road work will depend on intensity and breath of harvesting. If ongoing harvesting, more road work is required,. Costs will be paid for via stumpage arrangement. If a heavy harvest is anticipated, then decommissioning of associated roads would be done after the harvest. (\$184,000 is estimated). This cost would need to be paid out of operating funds. Per Section 7 page 3/12 of the easement – ‘Maintenance; Repair’, NCLC is responsible for their share of usage. The District would need to put a process in place to track and record usage.

Explanation of Cost and Revenue Assumptions

Costs

Line Item	Discussion
Inflation Rate on Costs	<p>A change in the Fed’s monetary policy over time is generally credited in part for the higher inflation rates earlier in that time span. As the Fed’s target inflation rate was pegged lower, at 2%, average actual inflation has been lower. Looking at that , in combination with the Fed’s 30-year inflation forecast, was the basis for bringing our number closer to 3% rather than the 50-year average of 3.69 which is skewed by early monetary policy.</p> <p>“Two commonly accepted measures of anticipated inflation are (a) the spreads between nominal and real yields on US government deb, and (b) regular surveys conducted by the Federal Reserve Bank on anticipated inflation. As of this writing, the former implies 2.2% inflation, and the later 2.0% inflation. As a result, our forecasts build in some degree on conservatism”.</p>



Revenue

Line Item	Discussion
“Endowment” Fund	<p>The account has \$475,00 ish in working capital, including \$75,000 in Hollis Grant funding. Cash from the account is used to pay for One-Time Projects expenses and Operating expenses until ARPA reimburses for One Time Project expenses. Until 2026, \$200,000 should always be available to pay One-Time Expenses. Hollis Funds (the principle) can only be spent on Roads. Those funds are likely to be spent by 2029.. If NCLC pays their share of usage, those funds will last longer.</p>
Stumpage Pricing	<p>Prices:</p> <ul style="list-style-type: none"> • Are net revenue. Contractor will pay for all costs. • Includes some level of non-intensive slash abatement by contractor. (Need to confirm the level of work to be done and that it is appropriate) • Include \$15/thousand board feet for separate replanting contract where District can select stock
Harvest Revenue Future Discount Factor	<p>This discount factor is to account for risks to future revenues. Risks include, but are not limited to, fire / wind damage, extensive disease, more restricting legislation that impact harvest volumes, growth does not align with model</p>
Local Option Levy	<p><u>Revenue:</u> Duration is 5 years. Cap is whatever tax payers will tolerate within the allowed \$10 / \$1000 property valuation</p> <p><u>Costs:</u> Legal work to research and prepare, market research to best determine amount, and work of political action committee to organize and mount a campaign. (Costs associated with campaign cannot be paid by the District)</p>

