

Arch Cape Forest-Watershed



Near and Long Range Planning: Managing the Watershed & Paying for it Part I – Operations Costs and Payment Alternatives

January 15, 2024 (updated)

Setting the Stage: The Overarching Question

- 1) How should we pay for the ongoing management and operations costs of the Watershed?
 - Logging
 - Rate increases
 - Local Option Levy
 - A combination of the above
- 2) No answer needs to be given today or for the next little while. Today's objective is information sharing to kick off community conversations.
- 3) However, unless someone(s) donate a significant endowment fund, this question will need to be answered by every Water District Board (as the representative of the Community) during every annual budget cycle.

Agenda

- What has been learned so far about ongoing costs
- Four “revenue levers” for paying for ongoing operating costs
- 50 year planning horizon for paying for the forest with Payment Options Examples
- Appendices

Board initiates a Comprehensive Planning Process

In July, to create a process for answering that question, the Water District Board convened a new Finance Committee and Forest Management Committee comprised of forestry and financial expertise . . .

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)

Financial Overview

- **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
- **Work Underway :** \$1,000,000+ of funded improvements – precommercial thinning & roads system
 - Federal ARPA (COVID) funds, Oregon Clean Drinking Water Fund
 - Funds Must be 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 \$300,000 donations and a Hollis grant to maintain an endowment fund



Scope of Work

Level of Work

Improving the Forest

- Project Mgmt.
- Funding Mgmt. & Compliance
- Procurement & Contracting
- Pre-Commercial Thinning
- Roads Construction
- Policies & Procedures Dev.

Funded - \$1,000,000 +

Ongoing Management & Operations

- Property Management
- Operations Planning & Financial Management
- Funding Mgmt. & Compliance.
- Forestry & Roads Maintenance.
- Logging (Potentially)

Available: \$300K +

Nov 2023

Aug 2026

2072

Guiding Objectives

The ongoing planning process will be guided by objectives voiced by the Community

Community-Voiced Objectives	Approach Incorporated into the Planning Process
Protect the quality and quantity of Water	<ul style="list-style-type: none">• The Road Infrastructure will be stabilized, improved and maintained – the single most important strategy to prevent erosion, sedimentation and provide for fire protection access
Maintain the health of Forest (to be further defined over time)	<ul style="list-style-type: none">• Costs for future “pre-commercial thinning” of the forest are included. Thinning times and costs included in the model but subject to future decisions as there is not a single point of view from industry experts. (Pre-commercial is not logging.)• Retention pools or other strategies for increasing quantity of water will not be included at this time.
Engage the community in how the costs of the Forest will be paid	<ul style="list-style-type: none">• All potentially viable options have been considered with possible future options identified. (Unlikely that costs of water will be reduced.)

Here's where we are in the process!

- **What has been done:**

- Costs

- Developed a set of assumptions about the operations and administrative work that will be required and its costs.
- Developed assumptions about ongoing management of the forest by a consulting forester in conjunction with District Manager

- Revenue - Considered logging and rate increases as alternative or blended methods to pay for those costs

- Scenarios: Built a modeling tool to evaluate alternative scenarios / options

- **Unknowns:**

- Allocation of Roads Maintenance Costs: Annual cost estimated at \$13,000 with inflation. NCLC payment will decrease estimated costs to the District. Discussions with NCLC have been initiated.

- **The Path Ahead:**

- Rate Payer Engagement: Understand preferences for logging or rate increases or local option levy
- Annual Budgeting: Formalize an annual budget process to refine financial projections and payment decisions on a year-to-year basis

NO DECISIONS NEED TO BE MADE FOR UNTIL FALL 2024– GIVING THE COMMUNITY TIME TO CONSIDER & DISCUSS

Annual Operating Assumptions

These detail behind these assumptions are contained in the Appendices. Expenses are likely to change slightly, up or down, as we learn more over time.

OPERATING EXPENSE ASSUMPTIONS	No Logging Annual Avg.
Insurance	-
ODF Fire Assessment	(2,450)
Property Manager (District Staff)	(5,568)
Forest Management & Forestry	(13,085)
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	None
TOTAL EXPENSES	(44,183)

Average Annual Cost without inflation

MODELING ASSUMPTIONS	Annual Avg.
Inflation in Costs	3%
Interest on Municipal Qualified Investments	3%
Inflation in Timber Prices	2.8%

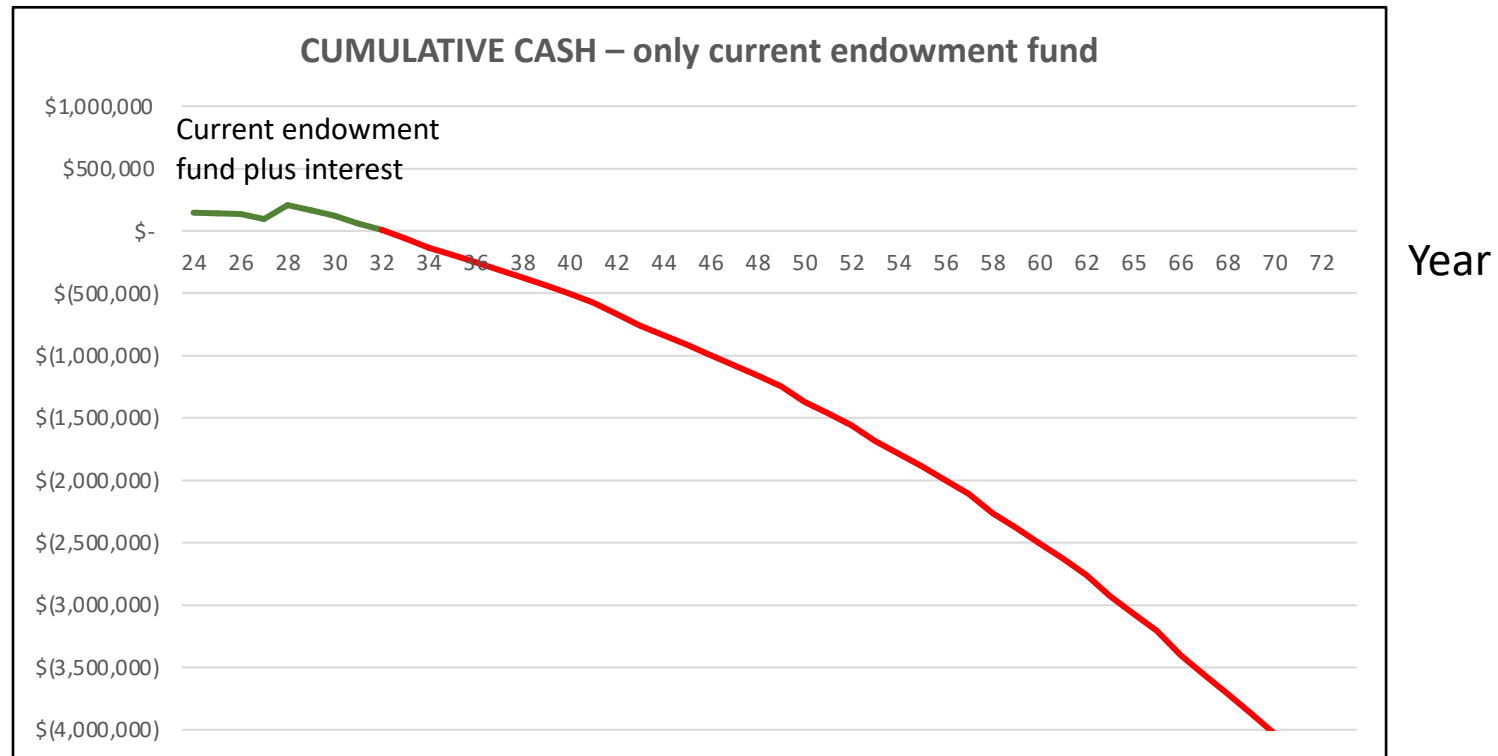


Per the easement, NCLC is responsible for their usage share of these costs. A monitoring/ recording process may need to be put in place with them. We are checking if other adjacent landowners have a similar requirement.



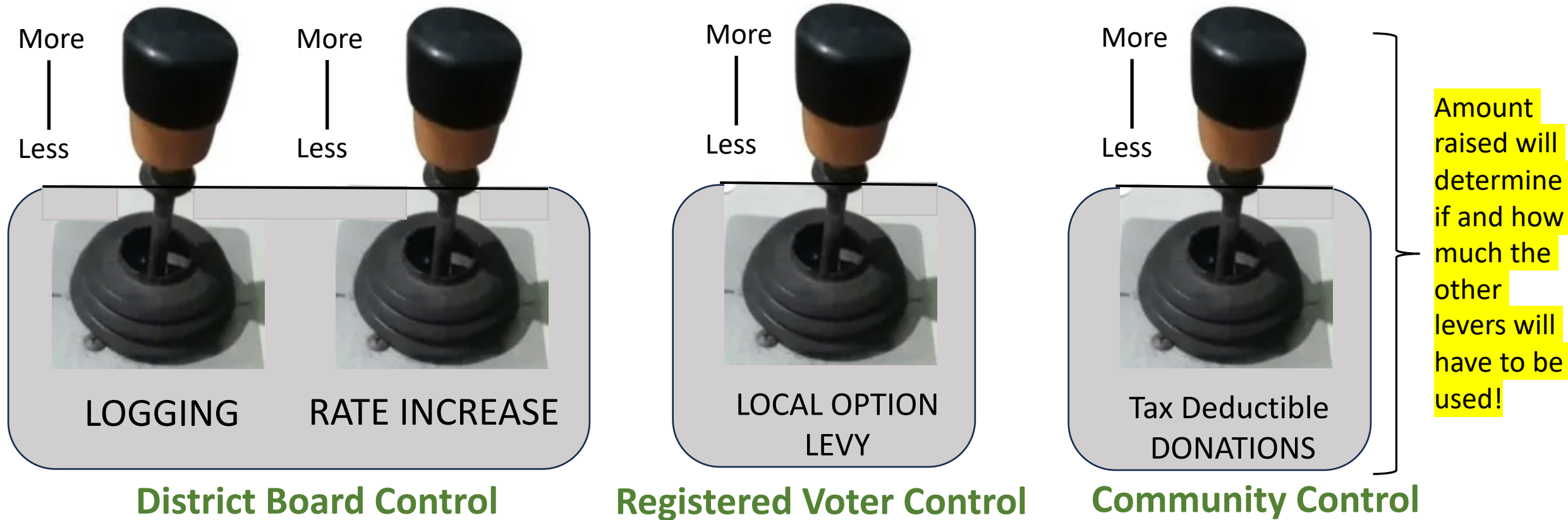
Cumulative Operating Cash -Projection If no additional revenue

Without any additional revenue, the \$300,000-ish of current contributions will last until 2031-2032. After that, there is likely to be no remaining money to pay for operating costs.



Options for Paying for Operating Costs

There are four "revenue levers" that can be used to pay for these operating costs. The District Board only has control over 2 of them.



The four levers can be used singly or in combination - creating a variety of payment options. Any they can be reset at any time.

50 YEAR

PLANNING HORIZON for paying for the Forest



2024 - 2073

If **One** Lever Used – 2 Possible Payment Options Totally Board Controlled



Option 1 - Stewardship Harvest (Year 9, 18, 30, 42): Log inside and outside of the Drinking Water Source Area (DWSA) – cut 16% of total acreage (1453 acres)

- Year 9 - 52 acres harvested for 1,5250,000 Board Feet
- Year 18 – 57 acres harvested for 1,655,000 Board Feet
- Year 30 – 60 acres harvested for 2,004,000 Board Feet
- Year 42 – 58 acres harvested for 1,992,000 Board Feet



OR



- **Option 2 – Rate Increase OR a Local Option Levy** (a Local Option Levy could be the first step with Rate Increases if Levy does not pass)

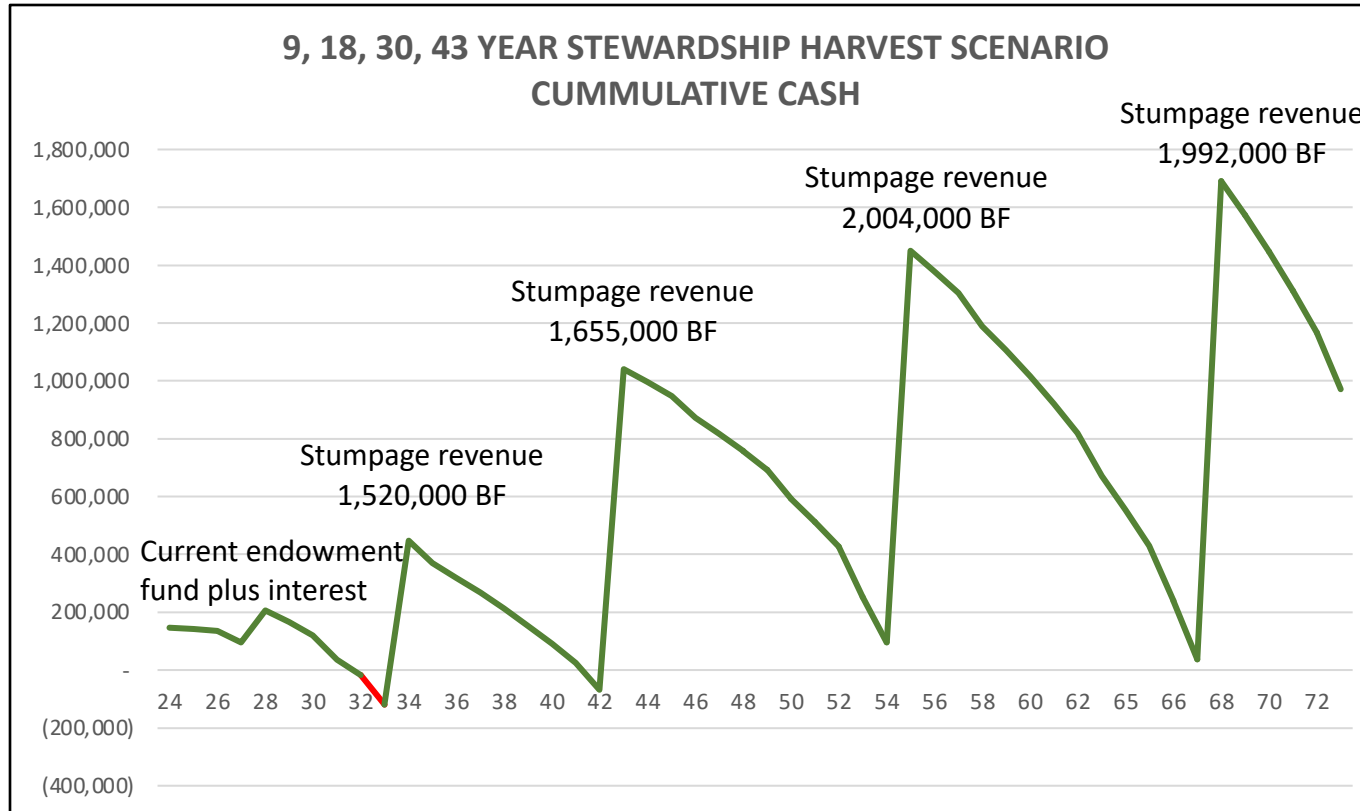
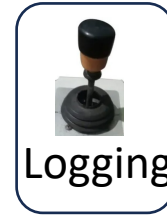
\$110 / year increase in water rates starting in July 2025: No harvest projected




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: Logging

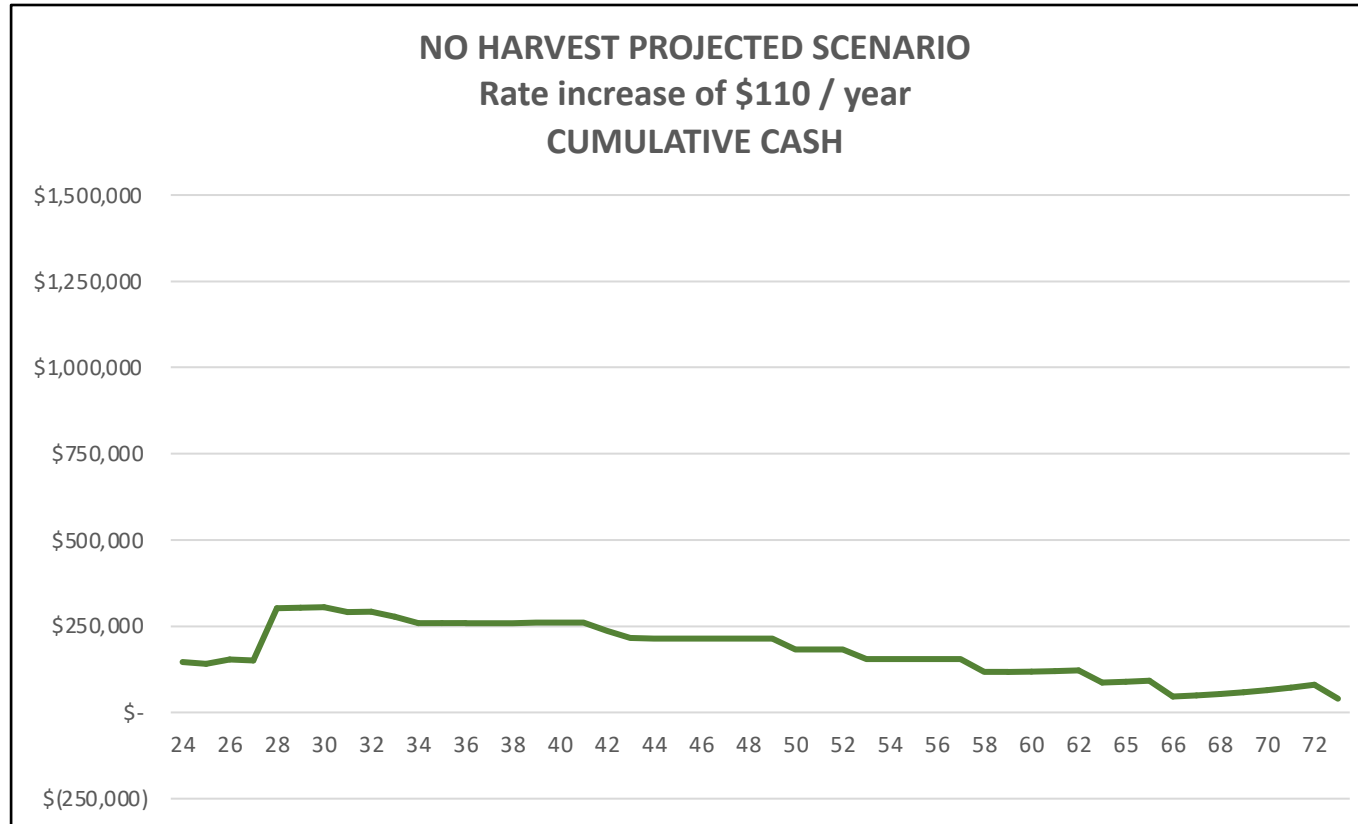
Stewardship Harvest (Years 9, 29 & 44) inside and outside DWSA Cumulative Operating Cash



 - Based on current estimate of operating expenses

Year

Option 2: Rate Increases
Rate increase of \$110 / year starting in July 2025
Cumulative Operating Cash



- Based on current estimate of operating expenses
- Rate increases would need **to start in July 2025** to maintain this funding level
- If rate increases become too burdensome for ratepayers, they can be replace with logging.

- Rate increases start in July 2025 with 306 hookups (per ACWD long range budget) @ \$110 / year
- Hookups increase by 2 each year (per ACWD long range budget)
- 3% annual inflation in rate amount

If **Two** Levers Used – 1 Possible Payment Option Totally Board Controlled



• **Lever 1 – Logging**

Stewardship Harvest (Year 9, 19, 29 & 39): Log ONLY outside the Drinking Water Source Area (DWSA) – cut 28 % of total acreage (730 acres)

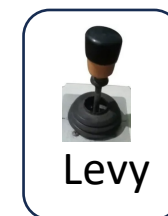
- Year 9 - 28 acres harvested for 766,000 Board Feet
- Year 19 – 104 acres harvested for 2,416,000 Board Feet.
- Year 29 - 46 acres harvested for 2,109,000 Board Feet.
- Year 39 – 25 acres harvested 1,818,000 Board Feet.

AND



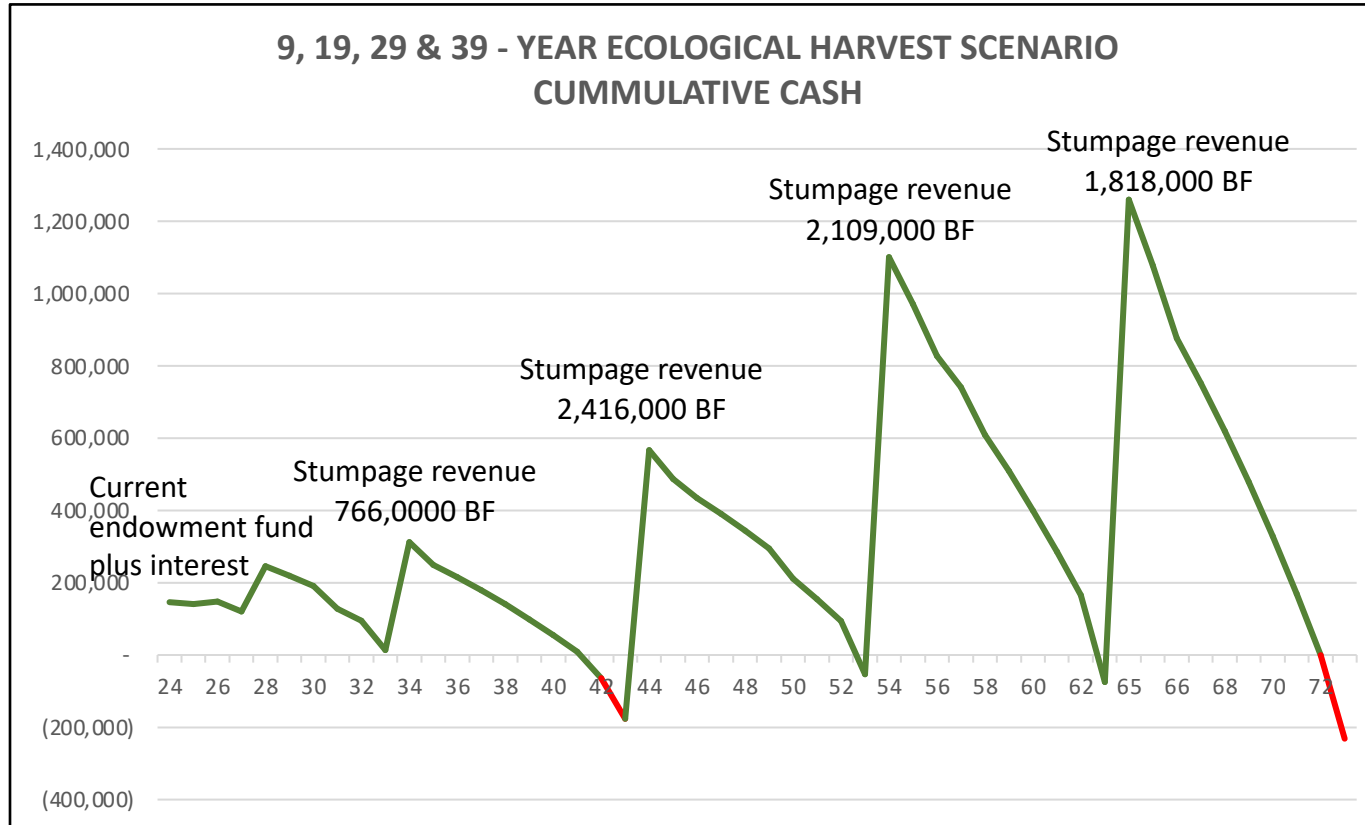
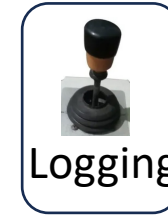
- **Lever 2 – Rate Increase OR a Local Option Levy** (a Local Option Levy could be the first step with Rate Increases if Levy does not pass)

\$75 / year increase in water rates from July 2025 – June 2052



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 3: Logging + Rate Increases
Ecological Harvest (Years 9, 19, 29 & 39) ONLY outside DWSA
Cumulative Operating Cash

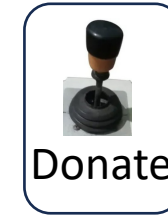


- Based on current estimate of operating expenses

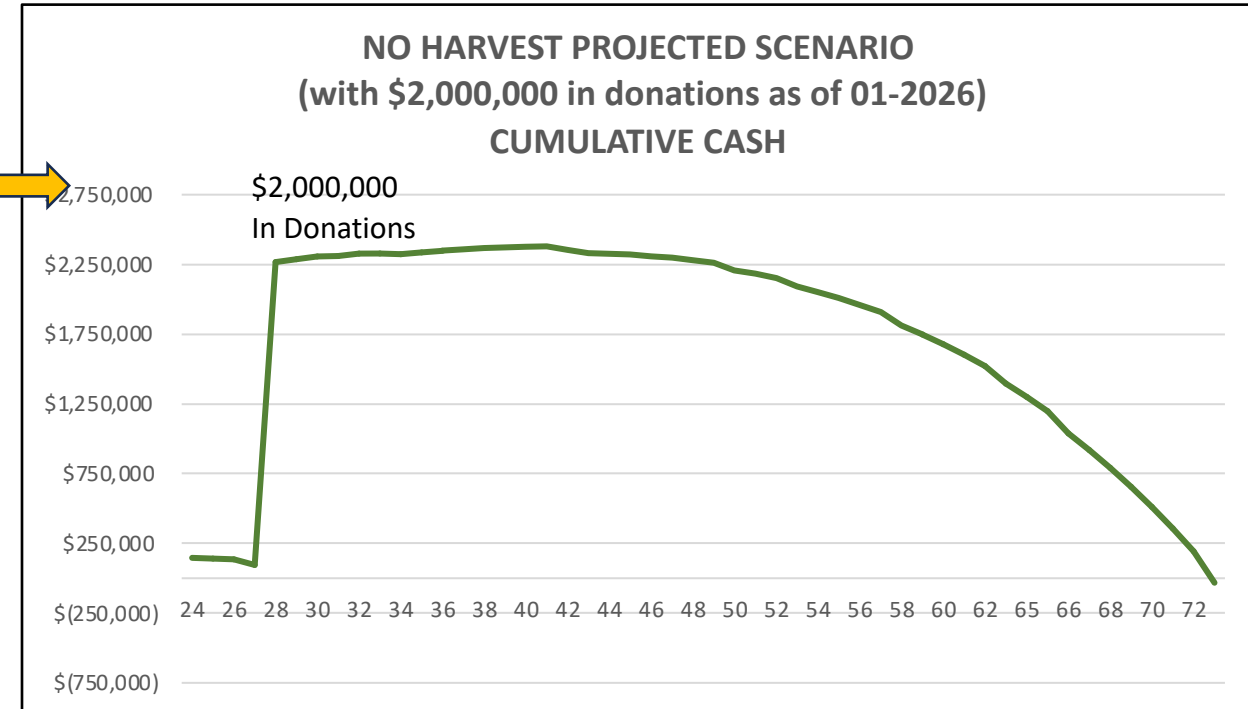
- Rate increases start in July 2025 with 302 hookups (per ACWD long range budget) @ \$75 / year. End in June 2052
- Hookups increase by 2 each year (per ACWD long range budget)
- 3% annual inflation in rate amount

Option #4: Tax Deductible Donations

Community Controlled Payment Option



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. Not in scope of Board..



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.

Discussion

Our objective during this next year is to engage rate payers and lot owners in the decision-making process – so that everyone has an informed voice.

Today's Questions:

- What more information do you want to know?
- Who in the Community, if anyone, will lead & participate in a fund raising campaign?
- What method do you prefer for communicating your perspective; surveys, forums like this, something else?
- Other topics?

Ongoing Question:

What strategy should be used to pay for ongoing operations costs of the Watershed – logging, rate increases, local option levy or a combination?

Appendix

FAQ

1) Other than pre-commercial thinning - is there any other logging that should be done for the “health” of the forest?

Hayes: 10-15 from now a variable retention harvest of hemlock stands, inside and outside of the source water protection area, would provide greater resilience for the forest and species diversity – (due to hemlock mortality, cedar die off) This is included in Ecological Harvest Option.

2) Can logging be done more frequently than every 20 years?

Hayes: Optimum harvesting for this property is when timber volume to be harvest in a given year is between 750,000 board feet and 1,000,000 board feet (MBF). The cost/benefit is better at 1 MBF but big production loggers may not protect the source water and the roads usage is more destructive.

One – Time Projects: Costs & Funding



FUNDING		REMAINING	
ARPA - Unspent / Uncontracted		\$	754,540
Drinking Water Fund		\$	30,000
Hollis		\$	12,500
			\$77,500 into endowment fund
TOTAL		\$	797,040
COST ESTIMATES		SPENT	BUDGETED
Proj. Mgmt, Procurement, Contracting	\$	(53,554)	\$ (38,569)
Roads Contract Mgr / Forester			\$ (85,000)
			Pending RFP
Finance Mgmt	\$	(8,000)	\$ (21,000)
Construction - Brushing / Main	\$	(55,400)	\$ (10,000)
			Shingle Mill Road Rocking
Construction - 5 projects			\$ (265,577) *
Decommissioning - Red Roads			\$ (184,117) *
Decommissioning - Yellow Roads			\$ (92,766) *
Rock for Shingle Mill & DWSA			\$ (42,500)
Buying all other rock and Rolling & Grading			\$ (30,000)
Planting after decommissioning			\$ (20,000)
Legal Fees			\$ (7,500)
			Review of contracts and easements prior to any road decommissioning taking place.
Forestry Consultant	\$	(97,431)	
Land Acquisition	\$	(940,000)	\$ -
Land Maint + Repair (PreCommercial Thinning)	\$	(85,266)	\$ -
Conservation Planning	\$	(5,850)	\$ -
TOTAL	\$	(1,245,500)	\$ (797,029)
			\$ -
NET			\$ \$ 11

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

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) 16 hrs / month @ \$145/hr	8 hrs / month @ \$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"> \$300,000-ish from prior donations with \$150,000 required for working capital until 2026. Interest only calculated on \$150,000 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	10% in year of harvest. (Factor accounts for inventory risk, modeling risk, pricing risk)
Local Option Levy	TBD
Grants	TBD
Donations	TBD
Rate increases	Included as one of the payment options
Carbon Sequestration	A future consideration (https://landyield.com/)



Explanation of Forest Management Line items Detail



Line Item	Discussion - Detail
Property Manager	Responsibilities: 1) Coordinate, with bordering landowners, forest management activities, road maintenance and other issues (with Forester) 2) Patrol property 1x per week depending on season. Enforce policy as necessary or call enforcement. 3) 24/7 response to events that might occur. Track who is on the property and where contractors are and monitor them 4) Be the emergency point of contact for fire response and contractors working in the Forest. 5) Manage the keys to the Watershed gates. 6) 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>



Rate Increases vs Levies



Comparison Factor	Rate Increases	Local Option Levy
Purpose	Depending upon when increases start – increase the endowment fund to pay for future operating costs and/or pay for current operating costs	Depending upon when Levy is put on the ballot - increase the endowment fund to pay for current operating costs and/or to pay for future operating costs
Maximum Amount	Determined by Board	\$ XXX,XXX for each levy depending on what voters are likely to pass (amount not known yet)
Maximum Duration	Any duration	5 years per levy
Applies to	Every rate payers (home with a water hookup but not lots)	Every home and lot
How is burden allocated?	Even amount across all 302+ rate payers	Amount varies by tax value of home / lot
Approximate households that could weigh in	Informal vote / survey of 302+ household	By vote of registered voters in Arch Cape Water District 175-ish registered voters representing 60+ households) 60 households determine for 300+ households