

Village of Ephraim



20 Year Financial Plan



20 Year Plan Overview

What follows is a 20 year budget plan for the Village of Ephraim for review and consideration.

It is not a request for funds or an absolute prediction of future financial needs and/or requirements. It is a bottom up consolidation of the views of the various Village of Ephraim committees and department heads as to competing future financial needs as of October 2017.

It is, by its very nature, designed to be a living document, with changes to be made as and when change dictates.

It is one of many management tools available to focus the attention of Ephraim's various managers and elected officials on the various cost centers as they exist today.

Because no one can predict with any degree of real accuracy financial conditions even a few years out, certain assumptions were made going forward about such factors as the rate of inflation, the cost of goods and services, and legislative changes to name just a few. These assumptions were made in consultation with professionals currently working in these respective fields. Each offered guidance, not predictions.

All working on this project are fully aware that this document can be made better. And that, perhaps, is its greatest value.

Respectfully submitted.

Brent Bristol, Village Administrator

Paul Roppuld, Village Trustee

**General Fund - Village of Ephraim
20 Year Future Financial Liability Forecast**

Item	Replacement Year	Replacement Cost	Adjustment for Inflation (2.6%) Current Estimate*(1.026)^ # of years			
			2022	2027	2032	2037
Fire Department						
Command Vehicle	2019	\$ 60,000	\$ 68,216	\$ 77,558	\$ 88,178	\$ 100,253
Rescue Boat	2019	\$ 300,000	\$ 341,081	\$ 387,788	\$ 440,891	\$ 501,266
Pagers	2021	\$ 15,000	\$ 17,054	\$ 19,389	\$ 22,045	\$ 25,063
Portable Radios	2021	\$ 60,000	\$ 68,216	\$ 77,558	\$ 88,178	\$ 100,253
Turnout Gear	2023	\$ 150,000	\$ 170,541	\$ 193,894	\$ 220,446	\$ 250,633
Van/Command	2024	\$ 200,000	\$ 227,388	\$ 258,526	\$ 293,928	\$ 334,178
Tender	2025	\$ 200,000	\$ 227,388	\$ 258,526	\$ 293,928	\$ 334,178
Mini-Pumper	2029	\$ 300,000	\$ 341,081	\$ 387,788	\$ 440,891	\$ 501,266
Breathing Apparatus	2032	\$ 200,000	\$ 227,388	\$ 258,526	\$ 293,928	\$ 334,178
Rear Mount Pumper	2037	\$ 700,000	\$ 795,857	\$ 904,840	\$ 1,028,747	\$ 1,169,621
Addition/Multi Purpose Room	2024 ?	\$ 1,000,000	\$ 1,136,938	\$ 1,292,628	\$ 1,469,638	\$ 1,670,888
Physical Facilities						
Road Improvements	Every	\$ 50,000	\$ 56,847	\$ 64,631	\$ 73,482	\$ 83,544
Unforeseen Repair	Every	\$ 25,000	\$ 28,423	\$ 32,316	\$ 36,741	\$ 41,772
Pole Barn Upgrades	2019	\$ 55,000	\$ 62,532	\$ 71,095	\$ 80,830	\$ 91,899
Pier across from Hall	2020	\$ 20,000	\$ 22,739	\$ 25,853	\$ 29,393	\$ 33,418
Small Garage at Smith Parking	2020	\$ 20,000	\$ 22,739	\$ 25,853	\$ 29,393	\$ 33,418
Maintenance Shop Addition	2020	\$ 300,000	\$ 341,081	\$ 387,788	\$ 440,891	\$ 501,266
New Maintenance Shop	2020	\$ 1,000,000	\$ 1,136,938	\$ 1,292,628	\$ 1,469,638	\$ 1,670,888
Replacement of Ranger for Utility	2020	\$ 60,000	\$ 68,216	\$ 77,558	\$ 88,178	\$ 100,253
Additional Stormwater Work	2027	\$ 1,000,000	\$ 1,136,938	\$ 1,292,628	\$ 1,469,638	\$ 1,670,888
Anderson Dock Decking	2027	\$ 100,000	\$ 113,694	\$ 129,263	\$ 146,964	\$ 167,089
Roofs	2037	\$ 279,000	\$ 317,206	\$ 360,643	\$ 410,029	\$ 466,178
Siding/Paint	2037	\$ 103,000	\$ 117,105	\$ 133,141	\$ 151,373	\$ 172,101
Flooring	2037	\$ 93,000	\$ 105,735	\$ 120,214	\$ 136,676	\$ 155,393
HVAC	2037	\$ 59,000	\$ 67,079	\$ 76,265	\$ 86,709	\$ 98,582
Parking Lots	2037	\$ 262,000	\$ 297,878	\$ 338,669	\$ 385,045	\$ 437,773
Administration						
Office Upgrades/Additions/Renov	2027	\$ 200,000	\$ 227,388	\$ 258,526	\$ 293,928	\$ 334,178
Basic Technology Infrastructure	2027	\$ 40,000	\$ 45,478	\$ 51,705	\$ 58,786	\$ 66,836
Property Purchase	2027	\$ 1,000,000	\$ 1,136,938	\$ 1,292,628	\$ 1,469,638	\$ 1,670,888
Major Technology Infrastructure	2027	\$ 1,000,000	\$ 1,136,938	\$ 1,292,628	\$ 1,469,638	\$ 1,670,888
Total: Current Pricing		\$ 8,851,000	\$ 10,063,039	\$ 11,441,052	\$ 13,007,767	\$ 14,789,025



Administration 20 Year Plan

The administration portion of the 20 year financial plan is short but it does include a few options for significant expenditures. It is short because our liabilities are somewhat limited being that the physical facilities department picks up the building and property maintenance, and it is short because we currently have a comprehensive capital reserve schedule. With that said, as with the twenty year plan moving forward, inflation has to be accounted for as to not be surprised with underfunded accounts as replacement dates approach.

The first item is office upgrades/additions/renovations. While this building serves us well now it is unlikely to sustain the department for the next 20 years. Do to record retention we will one day soon run out of storage. The meeting space is limited and not a likely candidate for seamless integration of technological advancement as we move deeper into the 21st century. This item is on the list without a single clear solution on the horizon. Options include a structural addition to this building, piggy backing onto a possible fire station addition with a multi-purpose meeting room, or in the event the library no longer utilized their current space, renovation of that area could be an option. Associated costs for the various projects would vary greatly but a minimum assumption would be a \$200,000 liability.

Next on our list is technology infrastructure. There are two categories here. One for basic advancement and another for the possible larger scale project. This is broad and broad intentionally. I see this as a place to set money aside for the inevitable tech advancement within the local government world. Some of these expenses could be government mandates which would bind us financially to a purchase, others would be for things like a village wide internet accessibility, or from a simple operations standpoint, phone systems, meeting communications and audio systems. Quite simply "technology infrastructure"..

The last option is for planning for a possible property purchase. Not that one is in the works, but I did see the value in putting it somewhere on the list in order for it to show if nothing else as a line item.

Physical Facilities

20 YEAR PLAN

Storm Water System

Highway 42 to the Bay 2019

Off the Highway 2027

Lots of variables yet on both of these. We have a storm water sub-committee meeting on 10/4/17 where hopefully I can get more information on pricing but for right now I would say \$1,000,000 for both.

Small Two Bay Garage by Smith Parking Lot 2020 or when sidewalks are installed \$20,000

This would be used for seasonal storage of tractors or lawn mowers, this would save a lot of time having the equipment closer to where the most use is. Would need to have heat and drainage if a sidewalk blower was to be kept in there.

Maintenance Shop 2020 or sooner

We have outgrown the maintenance shop and need more heated space. When the big truck comes inside in the winter we have to hang tennis ball from the ceiling so we can park it in its exact spot, when parked you cannot even walk around it. We do not have a break room or locker room and the office is too small. As it is one truck and the tractor are in cold storage .

Option 1 \$300,000

Build additional structure directly behind our current location with taller ceilings and more square footage, at least 3 full vehicle bays plus a wood shop and a break room with some updates to our current space.

Option 2 \$1,000,000

Build a new maintenance facility to the west of the pole barn. The maintenance building that Baileys Harbor built a couple of years ago for \$800,000 is a very nice facility and would suit Ephraim's needs for years to come. Gibraltar just built a new shop also but for \$1,230,000 it is obviously very nice but has some features I don't think we wouldn't necessarily need.

Pole Barn 2018 \$55,000

This would include roof extensions on both sides, one side would be completely enclosed with a garage and service doors this would be used for storing the rescue boat and summer equipment in the winter in the summer we would store winter equipment. I think if this side extension is to store the fire department boat then the fire department can be asked to share cost this side would be \$20,000 with concrete floor. The other side would have a roof and walls just down to the lower roof line, under here we would store materials such as sand/salt, salt, topsoil, and stone. It would need a hard floor and dividers. Also would install a hard floor with drains inside of the barn if the extensions have a hard floor they should also have drainage.

Work Vehicles

Option 1 \$180,000

Dump Truck #1 F-550 Purchased 2015 Replace 2025

Dump Truck #2 ???? Purchase 2018 Replace 2028

Crew Cap Utility ??? Purchase 2018 Replace 2028

Figuring the vehicles at \$60,000 a piece 2 dump trucks a one service body crew cab truck all with snow plows. One dump truck would have a spreader and the other would have a liquid deicing system, if we added side wing plows to the dump trucks it would add almost a additional \$10,000 per truck

Building and Grounds

Location----- **Current Maintenance facility**

Roof----- 2047 \$10,000

Paint----- Siding 2037 \$7,000

Flooring-----NA

HVAC----- 2027 \$5,000

Parking Lot Rebuild-- 2020 \$50,000 Shared With WW

Parking lot seal----- 2030 \$8,000 Shared With WW

Building and Grounds

Location-----	Fire Station		
Roof-----	2040	\$25,000	
Paint-----	2019	\$15,000	
Flooring-----	2020	\$2,000	
HVAC-----	2035	\$5000	
Parking Lot Rebuild--	2020	\$25,000	
Parking lot seal-----	2030	\$5,000	

Building and Grounds

Location-----	Admin Office		
Roof-----	2045	\$12,000	
Paint-----	2025	\$5000	
Flooring-----	2037	\$5000	
HVAC-----	2040	\$7000	
Parking Lot Rebuild--	2020	\$25,000	
Parking lot seal-----	2030	\$5,000	

Building and Grounds

Location-----	Anderson Dock		
Roof-----	2037	\$12,000	
Paint-----	2027	\$8,000	
Siding -----	2022	\$8,000	South side only
Flooring-----	N/A		
HVAC-----	N/A		
Parking Lot Rebuild---	2037	\$40,000	
Parking lot seal-----	2018	\$7000	

Building and Grounds

Location----- **Smith Building**

Roof----- 2037 \$7000

Paint----- 2037 \$ 3000

Flooring----- N/A

HVAC----- N/A

Parking Lot Rebuild-- 2022 \$45,000

Parking lot seal----- 2032 \$8,000

Building and Grounds

Location----- **Visitor Center**

Roof----- 2037 \$8,000

Paint----- 2047 \$7,000

Flooring----- 2037 \$5,000

HVAC----- N/A

Parking Lot Rebuild— 2022 \$7,500

Parking lot seal----- 2032 \$1,000

Building and Grounds

Location----- **Village Hall**

Roof----- 2067 \$200,000

Paint----- 2042 \$50,000

Flooring----- 2047 \$75,000

HVAC----- 2042 \$40,000

Parking Lot Rebuild-- 2032 \$30,000

Parking lot seal----- 2022 \$5,000

Building and Grounds

Location----- **Harborside Park**

Roof----- 2037 \$5,000 Gazebo

Paint----- as needed

Flooring----- N/A

HVAC----- N/A

Parking Lot Rebuild-- 2042 \$50,000

Parking lot seal----- 2018 \$7,000

Building and Grounds

Location----- **Firehouse Marina**

Roof----- 2032 \$5,000

Paint----- as needed

Flooring----- 2037 \$6000

HVAC----- 2037 \$2,000

Parking Lot Rebuild-- 2037 \$50,000

Parking lot seal----- 2027 \$7,000

Building and Grounds

Location----- **Beach**

Roof----- 2047 \$5,000

Paint----- as needed

Flooring----- N/A

HVAC----- N/A

Parking Lot Rebuild-- 2037 \$50,000

Parking lot seal----- 2018 \$7,000

Anderson Dock Resurface 20?? \$200,000

This would be a large project that would be shared between Physical Facilities and Marinas and Moorings. I believe Brent has some numbers on this but it would be a couple hundred thousand dollars I imagine.

Personnel

Full Time \$25,000-\$35,000 Per Year

Part Time \$10,000- \$20,000 Per Year

After the last couple and depending on future work load in the years to come, I think we could use additional staffing, even if we hired a part time just to maintain flowers and plantings would be a great help and would free up others for more maintenance related work.

Equipment

Tractor,loader, ditch mower 2018 \$40,000 tractor in capital reserve

Multi-one loader with sidewalk equipment, as soon as sidewalks are installed.

Lawn mowers currently in capital reserve but should be increased

Depending on future needs we may need to ad additional equipment or upgrade what we currently have.

Roads \$50,000 per year

I am in the being phases of this, I finally took a class this year on planning and budgeting for road repair / replace. There is some very good tools for budgeting but I have not had time to work with this yet, I was hoping to do this over the winter but from the class I don't think we are putting away enough money for this. For Physical Facilities roads are probably the biggest expense that we have. We need to start doing improvements on the roads before they get into disrepair and very costly.

Small Scale Maintenance Projects 2018 \$25,000

\$25,000 in a account for unexpected items such as shore front repair or unexpected equipment repair.

Dump Clean Up / public parking 2027 \$10,000

At the dump on German Rd. the cap on the old dump needs to be maintained and the property needs to be cleaned up, there is a lot of material out there that we could use once it is separated, screen soil for top soil, crush stone for gravel, push up fill piles. If the front area was cleaned up and graveled it could possibly be a good location for public parking of trailers.

Reconstruct Moravia Street and retaining wall from Q to Moravia Point 2020 \$500,000

This would be the upper wall that holds up Moravia shoulder, this is a long wall basically from Cty. Q to Moravia Point combination of concrete and steel. If this wall was to fail Moravia would have to be closed until repairs are made.

Dock/ Pier across from Hall 2020

Option # 1 \$20,000 remove decking and replace with stamped concrete to look like wood then reinstall railings.

Option # 2 \$3,000 disassemble, re-deck with treated lumber, and reassemble.

Review and adjust current capital reserve accounts.



Ephraim Fire Department
P.O. Box 138, Ephraim, WI 54211
Fire Chief Justin MacDonald
Office: (920) 854-5501 Fax: (920) 854-2072
Cell: (920) 495-0039

To: Ephraim Village Board

Re: 10 to 20 Year Financial Plan

Ephraim Board of Trustees,

The following is the 10 year and beyond Financial Plan for the Ephraim Fire Department. The numbers presented are only an estimate of the cost as with time costs tend to increase in the Fire Service.

I will put them in order as they will be needed, these needs may change over the next several years as things come up and things change in the Department.

2019- New Rescue Boat \$250,000-\$300,000. Our current Boat is a 1988 Boston Whaler that does the job for what we need, but to be more effective we are looking for a Boat with better Firefighting capability and Rescue capabilities. A new boat should have a larger Fire Pump, Dive Door and more room for patient care just to name a few.

2021-New Pagers for all department members \$15,000. We currently purchase pagers as needed, but the county is looking to go Digital sometime in the future and we will need to be compliant for what they go with. Pagers are the alerting system used to alert Firefighters when there is a call.

2021-New Portable Radios & Mobile Radios \$30,000. Again the County is looking at Digital and we currently have no Radios that would be Digital compliant. These radios are vital to the operation of the fire department and EMS as they are the way to communicate when someone is in trouble whether it is at a fire or medical incident.

2023-Turnout Gear (Helmets, Hood, Gloves, Boots, Jacket, Pants) \$150,000. Turnout gear is the vital for all Firefighters as this is what they use to go into burning building. Currently NFPA recommends that all Turnout Gear be replaced after 10 years of service. We currently wash gear that was directly involved in a fire right when we return to the station to attempt to prolong the use of it.

2024-1994 International Van \$200,000. The Van currently operates as our Rescue Truck carrying Jaws of Life, High Angle Rope Equipment, Ice Rescue Equipment, Cascade System and serves as a Command Post if needed. We would be looking at something that is better suited for our needs as a department.

2025-1995 International Tender \$200,000. The chassis we currently have has approximately 10,000 miles on it, but the tank on it from the mid 80's and currently is the smallest tender in the county.

2029-1999 F-550 Mini Pumper \$300,000. This truck pumps 1000 gallons a minute and is used for fighting fires down small & tight driveways and is a vital piece of equipment for the Village of Ephraim.

2032-Self Contained Breathing Apparatus \$200,000. This would be replacing the units we just purchased in 2017 as they have a life span of 15 years in the Fire Service. This would be purchasing Facepieces, Bottles, and Packs.

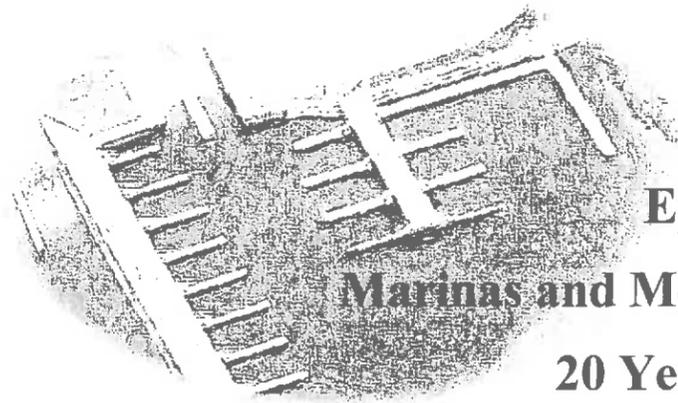
2037-2012 Rear Mount Pumper \$700,000. This would be the replacement of our Mainline Engine.

The unknown for the Fire Department is the Building, we currently are at capacity in our building as of now. We currently have 25 firefighters on our roster and I would like to recruit some more to fulfill the needs of responses we have. Firefighters currently dress next to the trucks which is unsafe as vehicles could be leaving and someone have the potential to be injured. We also lack lockable Offices for the Fire Chief and Assistant Fire Chief, the Fire Chief currently has another office at the Village Offices where all personal files are kept and anything that is confidential. Having lockable offices would also allow the Chief or Assistant Chief to conduct closed door meetings with department members if needed. As the department has grown our meeting room is also becoming cramped for space when having our monthly business meetings. We currently have firefighters standing when conducting those meetings, I would suggest that the Village and Fire Department join together in a joint meeting room for Village Board Meetings, Elections and Fire Meetings.

If there are any questions please feel free to ask.

Thank You

*Justin MacDonald
Fire Chief/EMT-B
Ephraim Fire Department*



Ephraim Marinas and Moorings 20 Year Plan

- Marinas and Moorings Department sits in a very solid financial position. With a current fund balance of \$208,000 the department is in a position, when forecasting out 20 years, of not having to overhaul our capital planning because of unattainable financial liabilities and goals. Annually approximately \$45,000 is contributed to the capital outlay account within the budget, which for the most part as seen on the schedule is covering the annual forecast. Some of the liabilities require proper capitalization while others can be undertaken on an as needed basis, with proper planning, within the annual budget.
- **Every Year – Re-deck 2 worst finger piers.** This is an annual maintenance project that will/can be taken out of the operating budget each year.
- **Every 5 Years – Replacement of worst finger pier.** Committee plan to replace the worst every 5 years. Capital improvement that requires annual contribution planning.
- **2022 – Re-Roof Office/Replace Windows.** Capital improvement that requires annual contribution planning.
- **2022 – Re-Surface Parking Lot/Marking.** Small enough of a maintenance project that this could be taken out of the operating budget as needed.
- **2023 – Dredging.** With high water this likely/hopefully will not be a realized liability for many years however the committee is planning to forecast in order to build the reserve in the next 5 years so that it is funded and ready when needed.
- **2026 – Re-Sheet & Re-Deck Firehouse Docks.** Capital improvement that requires annual contribution planning.
- **2026 – Siding/Painting of Dock Building.** Small enough of a maintenance project that this could be taken out of the operating budget as needed.
- **2028 – Purchase of Additional Waterfront** – Committee has discussed and expressed strong support for the consideration of purchase of property adjacent to village marina

facilities if and when it should become available. Capital expense that is planned for additional funding.

- **2028 – Silent Sports/Green Facility Upgrades** – Broad line item laying out the possibility for improvement/creation of existing and new silent sport facilities in the village. Capital line item.
- **2028 – Anderson Dock Sheeting Repair/Replacement** – The largest know liability for the committee. Currently working on a short term repair of the sheeting with the knowledge that within the next 10 years a major project will be required. Upon completion of this work we will be looking at the Anderson decking project as well.
- **2028 – Anderson Decking** – Hard to estimate this expense that likely would be a shared cost between the Marina and Physical Facilities group for the re-decking of the concrete portion of Anderson Dock. We will be getting core samples done of the concrete in the near future but in truth we will not know with 100% certainty what the cost will be until we excavate what is there. Depending on the level of fund balance at the time of needed construction this as well as the sheeting repair could be looking at a loan for the expenditure.

Physical Facilities - Village of Ephraim - 20 Year Future Financial Liability Forecast

Capital Reserve Schedule	Replacement Year	Replacement Cost	Yrs to Replace	Amnt Per Year	2018 Contribution	2019 Contribution	2020 Contribution	2021 Contribution	2022 Contribution	2023 Contribution	2024 Contribution	2025 Contribution	2026 Contribution	2027 Contribution	2028 Contribution	2029 Contribution	2030 Contribution	2031 Contribution	2032 Contribution	2033 Contribution	2034 Contribution	2035 Contribution	2036 Contribution	2037 Contribution
Physical Facilities																								
Road Improvements	Every	\$ 50,000		\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Unforeseen Repair	Every	\$ 25,000		\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Pole Barn Upgrades	2019	\$ 55,000	2	\$ 27,500	\$ 27,500	\$ 27,500																		
Pier across from Hall	2020	\$ 20,000	3	\$ 6,667	\$ 6,667	\$ 6,667	\$ 6,667																	
Small Garage at Smith Parking	2020	\$ 20,000	3	\$ 6,667	\$ 6,667	\$ 6,667	\$ 6,667																	
Maintenance Shop Addition	2020	\$ 300,000	3	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000																	
New Maintenance Shop	2020	\$ 1,000,000	3	\$ 333,333	\$ 333,333	\$ 333,333	\$ 333,333																	
Replacement of Ranger for Utility Truck	2020	\$ 60,000	3	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000																	
Additional Stormwater Work	2027	\$ 1,000,000	10	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000										
Anderson Dock Decking	2027	\$ 100,000	10	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000										
Roofs	2037	\$ 279,000	20	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950
Siding/Paint	2037	\$ 103,000	20	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150
Flooring	2037	\$ 93,000	20	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650
HVAC	2037	\$ 59,000	20	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950
Parking Lots	2037	\$ 262,000	20	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100
Department Total		\$ 3,426,000			\$ 616,467	\$ 616,467	\$ 616,467	\$ 149,800	\$ 39,800															
Annual Reserve Contribution					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -									
Reserve (Shortfall)/Surplus					\$ (616,467)	\$ (616,467)	\$ (616,467)	\$ (149,800)	\$ (39,800)															

Amortization/Borrowing Schedule	Replacement Year	Replacement Cost	Term(yrs)	Rate	2018 Contribution	2019 Contribution	2020 Contribution	2021 Contribution	2022 Contribution	2023 Contribution	2024 Contribution	2025 Contribution	2026 Contribution	2027 Contribution	2028 Contribution	2029 Contribution	2030 Contribution	2031 Contribution	2032 Contribution	2033 Contribution	2034 Contribution	2035 Contribution	2036 Contribution	2037 Contribution
Physical Facilities																								
Maintenance Shop Addition	2020	\$ 300,000	20	3.50%			\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108
New Maintenance Shop	2020	\$ 1,000,000	20	3.50%			\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361
Additional Stormwater Work	2027	\$ 1,000,000	20	3.50%										\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036
Anderson Dock Decking	2027	\$ 100,000	20	3.50%										\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036
Total					\$ -	\$ -	\$ 91,469	\$ 168,867																

Capital Reserve/Borrowing Schedule	Replacement Year	Replacement Cost	Mechanism	2018 Contribution	2019 Contribution	2020 Contribution	2021 Contribution	2022 Contribution	2023 Contribution	2024 Contribution	2025 Contribution	2026 Contribution	2027 Contribution	2028 Contribution	2029 Contribution	2030 Contribution	2031 Contribution	2032 Contribution	2033 Contribution	2034 Contribution	2035 Contribution	2036 Contribution	2037 Contribution
Physical Facilities																							
Road Improvements	Every	\$ 50,000	Annual Budget	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Unforeseen Repair	Every	\$ 25,000	Annual Budget	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Pole Barn Upgrades	2019	\$ 55,000	Capital Reserve	\$ 27,500	\$ 27,500																		
Pier across from Hall	2020	\$ 20,000	Capital Reserve	\$ 6,667	\$ 6,667	\$ 6,667																	
Small Garage at Smith Parking	2020	\$ 20,000	Capital Reserve	\$ 6,667	\$ 6,667	\$ 6,667																	
Maintenance Shop Addition	2020	\$ 300,000	Loan for Purchase in 2020			\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108	\$ 21,108
New Maintenance Shop	2020	\$ 1,000,000	Loan for Purchase in 2020			\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361
Replacement of Ranger for Utility Truck	2020	\$ 60,000	Capital Reserve	\$ 20,000	\$ 20,000	\$ 20,000																	
Additional Stormwater Work	2027	\$ 1,000,000	Loan for Purchase in 2027											\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036
Anderson Dock Decking	2027	\$ 100,000	Loan for Purchase in 2027											\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036	\$ 7,036
Roofs	2037	\$ 279,000	Capital Reserve	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950	\$ 13,950
Siding/Paint	2037	\$ 103,000	Capital Reserve	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150	\$ 5,150
Flooring	2037	\$ 93,000	Capital Reserve	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650	\$ 4,650
HVAC	2037	\$ 59,000	Capital Reserve	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950	\$ 2,950
Parking Lots	2037	\$ 262,000	Capital Reserve	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100	\$ 13,100
Total		\$ 3,426,000		\$ 125,633	\$ 125,633	\$ 189,603	\$ 156,269	\$ 233,667															
Annual Reserve Contribution				\$ -																			
Reserve/P&I Shortfall (Increase to Tax Roll)				\$ (125,633)	\$ (125,633)	\$ (189,603)	\$ (156,269)	\$ (233,667)															

Current Department Capital Reserve Amnts:	
HVAC	\$ 43,000.00
Roof	\$ 50,000.00

Fire Department - Village of Ephraim - 20 Year Future Financial Liability Forecast

Capital Reserve Schedule	Replacement Year	Replacement Cost	Yrs to Repla	Amnt Per Year	2018 Contribution	2019 Contribution	2020 Contribution	2021 Contribution	2022 Contribution	2023 Contribution	2024 Contribution	2025 Contribution	2026 Contribution	2027 Contribution	2028 Contribution	2029 Contribution	2030 Contribution	2031 Contribution	2032 Contribution	2033 Contribution	2034 Contribution	2035 Contribution	2036 Contribution	2037 Contribution
Fire Department																								
Command Vehicle	2019	\$ 60,000	2	\$ 30,000	\$ 30,000	\$ 30,000																		
Rescue Boat	2019	\$ 300,000	2	\$ 150,000	\$ 150,000	\$ 150,000																		
Pagers	2021	\$ 15,000	4	\$ 3,750	\$ 3,750	\$ 3,750	\$ 3,750	\$ 3,750																
Portable Radios	2021	\$ 60,000	4	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000																
Turnout Gear	2023	\$ 150,000	6	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000														
Van/Command	2024	\$ 200,000	7	\$ 28,571	\$ 28,571	\$ 28,571	\$ 28,571	\$ 28,571	\$ 28,571	\$ 28,571	\$ 28,571													
Tender	2025	\$ 200,000	8	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000												
Mini-Pumper	2029	\$ 300,000	12	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000								
Breathing Apparatus	2032	\$ 200,000	15	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333				
Rear Mount Pumper	2037	\$ 700,000	20	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000
Addition/Multi Purpose Room	2024 ?	\$ 1,000,000	7	\$ 142,857	\$ 142,857	\$ 142,857	\$ 142,857	\$ 142,857	\$ 142,857	\$ 142,857	\$ 142,857	\$ 142,857												
Department Total		\$ 3,125,000			\$ 463,512	\$ 463,512	\$ 313,512	\$ 313,512	\$ 294,762	\$ 294,762	\$ 269,762	\$ 241,190	\$ 73,333	\$ 73,333	\$ 73,333	\$ 73,333	\$ 48,333	\$ 48,333	\$ 48,333	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000
Annual Reserve Contribution					\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Reserve (Shortfall)/Surplus					\$ (413,512)	\$ (413,512)	\$ (263,512)	\$ (263,512)	\$ (244,762)	\$ (244,762)	\$ (219,762)	\$ (191,190)	\$ (23,333)	\$ (23,333)	\$ (23,333)	\$ (23,333)	\$ 1,667	\$ 1,667	\$ 1,667	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000

Amortization/Borrowing Schedule	Replacement Year	Replacement Cost	Term (yrs)	Rate	2018 Contribution	2019 Contribution	2020 Contribution	2021 Contribution	2022 Contribution	2023 Contribution	2024 Contribution	2025 Contribution	2026 Contribution	2027 Contribution	2028 Contribution	2029 Contribution	2030 Contribution	2031 Contribution	2032 Contribution	2033 Contribution	2034 Contribution	2035 Contribution	2036 Contribution	2037 Contribution
Fire Department																								
Command Vehicle	2019	\$ 60,000	10	3.50%		\$ 7,214	\$ 7,214	\$ 7,214	\$ 7,214	\$ 7,214	\$ 7,214	\$ 7,214	\$ 7,214	\$ 7,214	\$ 7,214									
Rescue Boat	2019	\$ 300,000	10	3.50%		\$ 36,072	\$ 36,072	\$ 36,072	\$ 36,072	\$ 36,072	\$ 36,072	\$ 36,072	\$ 36,072	\$ 36,072	\$ 36,072									
Turnout Gear	2023	\$ 150,000	10	3.50%						\$ 18,036	\$ 18,036	\$ 18,036	\$ 18,036	\$ 18,036	\$ 18,036	\$ 18,036	\$ 18,036	\$ 18,036	\$ 18,036					
Van/Command	2024	\$ 200,000	10	3.50%							\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048			
Tender	2025	\$ 200,000	10	3.50%								\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048		
Mini-Pumper	2029	\$ 300,000	10	3.50%												\$ 36,072	\$ 36,072	\$ 36,072	\$ 36,072	\$ 36,072	\$ 36,072	\$ 36,072	\$ 36,072	\$ 36,072
Addition/Multi Purpose Room	2024 ?	\$ 1,000,000	20	3.50%							\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361
Total					\$ -	\$ 43,287	\$ 43,287	\$ 43,287	\$ 43,287	\$ 61,323	\$ 155,732	\$ 179,781	\$ 179,781	\$ 179,781	\$ 179,781	\$ 172,566	\$ 172,566	\$ 172,566	\$ 172,566	\$ 154,530	\$ 130,482	\$ 106,433	\$ 106,433	\$ 106,433

Capital Reserve/Borrowing Schedule	Replacement Year	Replacement Cost	Mechanism	2018 Contribution	2019 Contribution	2020 Contribution	2021 Contribution	2022 Contribution	2023 Contribution	2024 Contribution	2025 Contribution	2026 Contribution	2027 Contribution	2028 Contribution	2029 Contribution	2030 Contribution	2031 Contribution	2032 Contribution	2033 Contribution	2034 Contribution	2035 Contribution	2036 Contribution	2037 Contribution
Fire Department																							
Command Vehicle	2019	\$ 60,000	Loan for Purchase in 2019		\$ 7,214	\$ 7,214	\$ 7,214	\$ 7,214	\$ 7,214	\$ 7,214	\$ 7,214	\$ 7,214	\$ 7,214	\$ 7,214									
Rescue Boat	2019	\$ 300,000	Loan for Purchase in 2019		\$ 36,072	\$ 36,072	\$ 36,072	\$ 36,072	\$ 36,072	\$ 36,072	\$ 36,072	\$ 36,072	\$ 36,072	\$ 36,072									
Pagers	2021	\$ 15,000	Capital Reserve	\$ 3,750	\$ 3,750	\$ 3,750	\$ 3,750																
Portable Radios	2021	\$ 30,000	Capital Reserve	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000																
Turnout Gear	2023	\$ 150,000	Loan for Purchase in 2024							\$ 18,036	\$ 18,036	\$ 18,036	\$ 18,036	\$ 18,036	\$ 18,036	\$ 18,036	\$ 18,036	\$ 18,036	\$ 18,036	\$ 18,036			
Van/Command	2024	\$ 200,000	Loan for Purchase in 2024							\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048		
Tender	2025	\$ 200,000	Loan for Purchase in 2024							\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048	\$ 24,048		
Mini-Pumper	2029	\$ 300,000	Capital Reserve	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000								
Breathing Apparatus	2032	\$ 200,000	Capital Reserve	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333	\$ 13,333				
Rear Mount Pumper	2037	\$ 700,000	Capital Reserve	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000
Addition/Multi Purpose Room	2024 ?	\$ 1,000,000	Loan for Purchase in 2024							\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361	\$ 70,361
Total		\$ 3,095,000		\$ 92,083	\$ 128,156	\$ 128,156	\$ 128,156	\$ 109,406	\$ 109,406	\$ 245,900	\$ 245,900	\$ 245,900	\$ 245,900	\$ 245,900	\$ 209,827	\$ 184,827	\$ 184,827	\$ 184,827	\$ 171,494	\$ 105,361	\$ 105,361	\$ 105,361	\$ 105,361
Annual Reserve Contribution				\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Reserve/P&I Shortfall (Increase to Tax Roll)				\$ (42,083)	\$ (78,156)	\$ (78,156)	\$ (78,156)	\$ (59,406)	\$ (59,406)	\$ (195,900)	\$ (195,900)	\$ (195,900)	\$ (195,900)	\$ (195,900)	\$ (159,827)	\$ (134,827)	\$ (134,827)	\$ (134,827)	\$ (121,494)	\$ (55,361)	\$ (55,361)	\$ (55,361)	\$ (55,361)

Marinas & Moorings - Village of Ephraim - 20 Year Future Financial Liability Forecast

Capital Reserve Schedule	Replacement Year	Replacement Cost	Yrs to Replace	Amnt Per Year	2018 Contribution	2019 Contribution	2020 Contribution	2021 Contribution	2022 Contribution	2023 Contribution	2024 Contribution	2025 Contribution	2026 Contribution	2027 Contribution	2028 Contribution	2029 Contribution	2030 Contribution	2031 Contribution	2032 Contribution	2033 Contribution	2034 Contribution	2035 Contribution	2036 Contribution	2037 Contribution
Marinas & Moorings																								
Re-Deck 2 Worst Finger Piers	Every	\$ 750	1	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750
Replacement of Finger Pier	Every 5	\$ 12,500	5	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500
Re-Roof Office/Replace Windows	2022	\$ 15,000	5	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000															
Re-surface Parking Lot/Marking	2022	\$ 2,500	5	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500															
Dredging	2023	\$ 50,000	5	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000															
Re-sheet & Re-deck N&S Docks	2026	\$ 25,000	8	\$ 3,125	\$ 3,125	\$ 3,125	\$ 3,125	\$ 3,125	\$ 3,125	\$ 3,125	\$ 3,125	\$ 3,125	\$ 3,125											
Siding/Paint Office Bldg	2026	\$ 3,000	8	\$ 375	\$ 375	\$ 375	\$ 375	\$ 375	\$ 375	\$ 375	\$ 375	\$ 375	\$ 375											
Purchase Additional Waterfront	2028	\$ 100,000	10	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000										
Silent Sports/Green Fac. Upgrades	2028	\$ 20,000	10	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000										
Anderson Sheeting Repair/Replaceme	2028	\$ 200,000	10	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000										
Replace Anderson Decking	2028	\$ 100,000	10	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000										
Department Total		\$ 528,000			\$ 61,500	\$ 48,000	\$ 48,000	\$ 48,000	\$ 44,500	\$ 44,500	\$ 2,500													
Annual Reserve Contribution					\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000				
Reserve (Shortfall)/Surplus					\$ (16,500)	\$ (3,000)	\$ (3,000)	\$ (3,000)	\$ 500	\$ 500	\$ 42,500													

Amortization/Borrowing Schedule	Replacement Year	Replacement Cost	Term(yrs)	Rate	2018 Contribution	2019 Contribution	2020 Contribution	2021 Contribution	2022 Contribution	2023 Contribution	2024 Contribution	2025 Contribution	2026 Contribution	2027 Contribution	2028 Contribution	2029 Contribution	2030 Contribution	2031 Contribution	2032 Contribution	2033 Contribution	2034 Contribution	2035 Contribution	2036 Contribution	2037 Contribution
Marinas & Moorings																								
Purchase Additional Waterfront	2028	\$ 100,000	20	3.50%																				
Anderson Sheeting Repair/Replaceme	2028	\$ 200,000	20	3.50%																				
Replace Anderson Decking	2028	\$ 100,000	20	3.50%																				
Total					\$ -	\$ 28,144																		

Capital Reserve/Borrowing Schedule	Replacement Year	Replacement Cost	Mechanism	2018 Contribution	2019 Contribution	2020 Contribution	2021 Contribution	2022 Contribution	2023 Contribution	2024 Contribution	2025 Contribution	2026 Contribution	2027 Contribution	2028 Contribution	2029 Contribution	2030 Contribution	2031 Contribution	2032 Contribution	2033 Contribution	2034 Contribution	2035 Contribution	2036 Contribution	2037 Contribution	
Marinas & Moorings																								
Re-Deck 2 Worst Finger Piers	Every	\$ 750	Annual Budget	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	
Replacement of Finger Pier	Every 5	\$ 12,500	Capital Reserve	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	
Re-Roof Office/Replace Windows	2022	\$ 15,000	Capital Reserve	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000																
Re-surface Parking Lot/Marking	2022	\$ 2,500	Capital Reserve	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500																
Dredging	2023	\$ 50,000	Capital Reserve	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000																
Re-sheet & Re-deck N&S Docks	2026	\$ 25,000	Capital Reserve	\$ 3,125	\$ 3,125	\$ 3,125	\$ 3,125	\$ 3,125	\$ 3,125	\$ 3,125	\$ 3,125	\$ 3,125												
Siding/Paint Office Bldg	2026	\$ 3,000	Capital Reserve	\$ 375	\$ 375	\$ 375	\$ 375	\$ 375	\$ 375	\$ 375	\$ 375	\$ 375												
Purchase Additional Waterfront	2028	\$ 100,000	Capital Reserve	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000											
Silent Sports/Green Fac. Upgrades	2028	\$ 20,000	Capital Reserve	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000											
Anderson Sheeting Repair/Replaceme	2028	\$ 200,000	Loan for Purchase in 2028																					
Replace Anderson Decking	2028	\$ 100,000	Loan for Purchase in 2028																					
Total		\$ 528,000		\$ 31,500	\$ 18,000	\$ 18,000	\$ 18,000	\$ 14,500	\$ 14,500	\$ 23,608	\$ 23,608													
Annual Reserve Contribution				\$ 45,000																				
Reserve/P&I Shortfall (Increase to Tax Roll)				\$ 13,500	\$ 27,000	\$ 27,000	\$ 27,000	\$ 30,500	\$ 30,500	\$ 21,392														

Fund Balance Overview	Replacement Year	Replacement Cost	Mechanism	2018 Contribution	2019 Contribution	2020 Contribution	2021 Contribution	2022 Contribution	2023 Contribution	2024 Contribution	2025 Contribution	2026 Contribution	2027 Contribution	2028 Contribution	2029 Contribution	2030 Contribution	2031 Contribution	2032 Contribution	2033 Contribution	2034 Contribution	2035 Contribution	2036 Contribution	2037 Contribution
Marinas & Moorings																							
Re-Deck 2 Worst Finger Piers	Every	\$ 750	Purchase	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750	\$ 750
Replacement of Finger Pier	Every 5	\$ 12,500	Purchase					\$ 12,500					\$ 12,500					\$ 12,500					\$ 12,500
Re-Roof Office/Replace Windows	2022	\$ 15,000	Purchase					\$ 15,000															
Re-surface Parking Lot/Marking	2022	\$ 2,500	Purchase					\$ 2,500															
Dredging	2023	\$ 50,000	Purchase						\$ 50,000														
Re-sheet & Re-deck N&S Docks	2026	\$ 25,000	Purchase									\$ 25,000											
Siding/Paint Office Bldg	2026	\$ 3,000	Purchase									\$ 3,000											
Purchase Additional Waterfront	2028	\$ 100,000	Purchase																				
Silent Sports/Green Fac. Upgrades	2028	\$ 20,000	Purchase																				
Anderson Sheeting Repair/Replaceme	2028	\$ 200,000	Purchase																				
Replace Anderson Decking	2028	\$ 100,000	Purchase																				
Annual Liabilities				\$ 750	\$ 750	\$ 750	\$ 750	\$ 30,750	\$ 50,750	\$ 750	\$ 750	\$ 28,750	\$ 13,250	\$ 420,750	\$ 750	\$ 750	\$ 750	\$ 13,250	\$ 750	\$ 750	\$ 750	\$ 750	\$ 13,250
Annual Reserve Contribution				\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000										
Net Change				\$ 44,250	\$ 44,250	\$ 44,250	\$ 44,250	\$ 14,250	\$ (5,750)	\$ 44,250	\$ 44,250	\$ 16,250	\$ 31,750	\$ (375,750)	\$ 44,250	\$ 44,250	\$ 44,250	\$ 31,750	\$ 44,250	\$ 44,250	\$ 44,250	\$ 44,250	\$ 31,750
Beginning Fund Balance				\$ 208,000	\$ 252,250	\$ 296,500																	

Wastewater - Village of Ephraim - 20 Year Future Financial Liability Forecast

Replacement Fund

Replace Fund Items:	Purchase / year	COST	Service Life	Calc	End of Service	Completed	2017 Running Only	2017 ALL	2018 Running Only	2019 Running Only	2020 Running Only	2021 Running Only
Garage Furnace	1995	\$2,500.00	20	0	2015	\$ 2,500	\$ -	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125
Portable trash pump	2003	\$2,500.00	20	6	2023	\$ -	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125
Bar screen receiving station	1987	\$5,700.00	25	0	2012	\$ 5,700	\$ -	\$ 228	\$ 228	\$ 228	\$ 228	\$ 228
Analytical balance	1992	\$2,200.00	25	0	2017	\$ 2,200	\$ -	\$ 88	\$ 88	\$ 88	\$ 88	\$ 88
Muffle oven	2008	\$1,900.00	20	11	2028	\$ -	\$ 95	\$ 95	\$ 95	\$ 95	\$ 95	\$ 95
PH meter & probe	2006	\$1,600.00	10	0	2016	\$ 1,600	\$ -	\$ 160	\$ 160	\$ 160	\$ 160	\$ 160
Spectrophotometer	2004	\$3,400.00	10	0	2014	\$ 3,400	\$ -	\$ 340	\$ 340	\$ 340	\$ 340	\$ 340
TSS oven	2010	\$1,400.00	10	3	2020	\$ -	\$ -	\$ 140	\$ 140	\$ 140	\$ 140	\$ 140
Effluent Sampler	2016	\$5,000.00	10	9	2026	\$ -	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500
Influent, Septage samplers	2005	\$5,600.00	15	3	2020	\$ -	\$ 374	\$ 374	\$ 374	\$ 374	\$ 374	\$ 374
Precision bath incubator	1990	\$1,595.00	25	0	2015	\$ 1,595	\$ -	\$ 64	\$ 64	\$ 64	\$ 64	\$ 64
Autoclave	1987	\$3,200.00	25	0	2012	\$ 3,200	\$ -	\$ 128	\$ 128	\$ 128	\$ 128	\$ 128
Lab Computer	2017	\$350.00	5	5	2022	\$ -	\$ -	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70
Office Computer	2017	\$350.00	5	5	2022	\$ -	\$ -	\$ 70	\$ 70	\$ 70	\$ 70	\$ 70
OIC's Laptop	2017	\$300.00	5	5	2022	\$ -	\$ -	\$ 60	\$ 60	\$ 60	\$ 60	\$ 60
Scada Computer	2017	\$10,000.00	6	6	2023	\$ -	\$ -	\$ 1,667	\$ 1,700	\$ 1,700	\$ 1,700	\$ 1,700
DO Meter YSI 5100	2014	\$1,500.00	5	2	2019	\$ -	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300
Fume Hood	1987	\$4,000.00	25	0	2012	\$ 4,000	\$ -	\$ 160	\$ 160	\$ 160	\$ 160	\$ 160
Lift Station #1 - Control panel	1987	\$5,000.00	25	0	2012	\$ 5,000	\$ -	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200
Lift Station #1 - rails & connections	2007	\$3,500.00	20	10	2027	\$ -	\$ 175	\$ 175	\$ 175	\$ 175	\$ 175	\$ 175
Lift Station #1 - generator	2003	\$10,300.00	25	11	2028	\$ -	\$ 412	\$ 412	\$ 412	\$ 412	\$ 412	\$ 412
Lift Station #1 - pump #1	2008	\$4,000.00	10	1	2018	\$ -	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400
Lift Station #1 - pump #2	2008	\$4,000.00	10	1	2018	\$ -	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400
Lift Station #2 - level control	2005	\$9,400.00	20	8	2025	\$ -	\$ 470	\$ 470	\$ 470	\$ 470	\$ 470	\$ 470
Lift Station #2 - control panel	2009	\$11,000.00	25	17	2034	\$ -	\$ 470	\$ 470	\$ 470	\$ 470	\$ 470	\$ 470
Lift Station #2 - Usemco drywell	1987	\$10,000.00	25	0	2012	\$ 10,000	\$ -	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400
Lift Station #2 - generator	1987	\$30,000.00	25	0	2012	\$ 30,000	\$ -	\$ 1,200	\$ 1,200	\$ 1,200	\$ 1,200	\$ 1,200
Lift Station #2 - pump #1	2005	\$7,000.00	25	13	2030	\$ -	\$ 280	\$ 280	\$ 280	\$ 280	\$ 280	\$ 280
Lift Station #2 - pump #2	2005	\$7,000.00	25	13	2030	\$ -	\$ 280	\$ 280	\$ 280	\$ 280	\$ 280	\$ 280
Lift Station #2 - control panel	2005	\$10,000.00	25	13	2030	\$ -	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400
Main Lift Station - VFD #1	2005	\$6,000.00	25	13	2030	\$ -	\$ 240	\$ 240	\$ 240	\$ 240	\$ 240	\$ 240
Main Lift Station - VFD #2	2005	\$6,000.00	25	13	2030	\$ -	\$ 240	\$ 240	\$ 240	\$ 240	\$ 240	\$ 240
Main Lift Station - VFD #3	2005	\$6,000.00	25	13	2030	\$ -	\$ 240	\$ 240	\$ 240	\$ 240	\$ 240	\$ 240
Main Lift Station - Pump #1	2005	\$20,000.00	20	8	2025	\$ -	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000
Main Lift Station - Pump #2	2005	\$20,000.00	20	8	2025	\$ -	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000
Main Lift Station - Pump #3	2005	\$20,000.00	20	8	2025	\$ -	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000
Alum Pump #1	1987	\$2,800.00	25	0	2012	\$ 2,800	\$ -	\$ 112	\$ 112	\$ 112	\$ 112	\$ 112
Alum Pump #2	2016	\$2,800.00	25	24	2041	\$ -	\$ 112	\$ 112	\$ 112	\$ 112	\$ 112	\$ 112
Screwscreen	2009	\$20,000.00	20	12	2029	\$ -	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000
Clarifier Drive System	2010	\$26,000.00	25	18	2035	\$ -	\$ 1,040	\$ 1,040	\$ 1,040	\$ 1,040	\$ 1,040	\$ 1,040
Influent flowmeter	2003	\$5,400.00	15	1	2018	\$ -	\$ 360	\$ 360	\$ 360	\$ 360	\$ 360	\$ 360
Effluent flow meter	2007	\$2,700.00	15	5	2022	\$ -	\$ 180	\$ 180	\$ 180	\$ 180	\$ 180	\$ 180
Effluent Pump #1	2005	\$8,000.00	20	8	2025	\$ -	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400
Effluent pump #2	1987	\$8,000.00	20	0	2007	\$ 8,000	\$ -	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400
Effluent Pump #3	2012	\$8,000.00	20	15	2032	\$ -	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400
Ford Pickup Truck	2001	\$30,000.00	15	0	2016	\$ 30,000	\$ -	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000
Plant generator	1987	\$75,000.00	25	0	2012	\$ 75,000	\$ -	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000
Holding tank flow meter	2003	\$5,400.00	15	1	2018	\$ -	\$ 360	\$ 360	\$ 360	\$ 360	\$ 360	\$ 360
Holding tank pump(east)	1990	\$16,000.00	25	0	2015	\$ 16,000	\$ -	\$ 640	\$ 640	\$ 640	\$ 640	\$ 640
Holding tank pump(west)	1990	\$16,000.00	25	0	2015	\$ 16,000	\$ -	\$ 640	\$ 640	\$ 640	\$ 640	\$ 640
Holding tank pump(lag)	1990	\$16,000.00	25	0	2015	\$ 16,000	\$ -	\$ 640	\$ 640	\$ 640	\$ 640	\$ 640
Grit removal system	1987	\$25,000.00	25	0	2012	\$ 25,000	\$ -	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000
Pumper truck	1988	\$110,000.00	25	0	2013	\$ 110,000	\$ -	\$ 4,400	\$ 4,400	\$ 4,400	\$ 4,400	\$ 4,400
Return activated pump East	1987	\$12,500.00	25	0	2012	\$ 12,500	\$ -	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500
Return activated pump West	1987	\$12,500.00	25	0	2012	\$ 12,500	\$ -	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500
Scada system	1993	\$75,000.00	25	1	2018	\$ -	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000
Sludge transfer pump #1	1987	\$15,000.00	25	0	2012	\$ 15,000	\$ -	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600
Sludge transfer pump #2	1987	\$15,000.00	25	0	2012	\$ 15,000	\$ -	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600
UV system	1990	\$125,000.00	25	0	2015	\$ 125,000	\$ -	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000
Basin DO meter	2017	\$5,000.00	10	10	2027	\$ -	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500
Water softener	2005	\$1,000.00	20	8	2025	\$ -	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50
Lab furnace & AC	2006	\$4,700.00	20	9	2026	\$ -	\$ 25	\$ 25	\$ 25	\$ 25	\$ 25	\$ 25
Modine heater (Vehicle room)	2006	\$1,900.00	20	9	2026	\$ -	\$ 95	\$ 95	\$ 95	\$ 95	\$ 95	\$ 95
Steam/cleaner - pressure washer	2006	\$2,600.00	20	9	2026	\$ -	\$ 130	\$ 130	\$ 130	\$ 130	\$ 130	\$ 130
Mud valve (Digester)	2007	\$2,500.00	20	10	2027	\$ -	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125
Mud valve (East aeration)	2008	\$2,500.00	20	11	2028	\$ -	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125
Mud valve (West aeration)	2009	\$2,500.00	20	12	2029	\$ -	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125
Well pump	2007	\$4,700.00	20	10	2027	\$ -	\$ 235	\$ 235	\$ 235	\$ 235	\$ 235	\$ 235
Lab flooring	2008	\$3,100.00	20	11	2028	\$ -	\$ 155	\$ 155	\$ 155	\$ 155	\$ 155	\$ 155
Lab Water Still & RO unit	2010	\$5,500.00	20	13	2030	\$ -	\$ 275	\$ 275	\$ 275	\$ 275	\$ 275	\$ 275
2 - Gas Detectors	2011	\$2,100.00	5	0	2016	\$ 2,100	\$ -	\$ 420	\$ 420	\$ 420	\$ 420	\$ 420
Aeration basin room Roof fan	2003	\$3,000.00	25	11	2028	\$ -	\$ 120	\$ 120	\$ 120	\$ 120	\$ 120	\$ 120
Aeration blower #1 w/VFD	2002	\$20,000.00	15	0	2017	\$ 20,000	\$ -	\$ 1,333	\$ 1,333	\$ 1,333	\$ 1,333	\$ 1,333
Aeration blower #2 w/VFD	2002	\$20,000.00	15	0	2017	\$ 20,000	\$ -	\$ 1,333	\$ 1,333	\$ 1,333	\$ 1,333	\$ 1,333
Aeration blower #3 w/VFD	1987	\$20,000.00	15	0	2002	\$ 20,000	\$ -	\$ 1,333	\$ 1,333	\$ 1,333	\$ 1,333	\$ 1,333
Currently RF Balance:		\$980,495				\$615,095	\$17,214	\$47,265	\$19,115	\$14,296	\$14,297	\$13,924
RF total:		\$980,495										
Target of 50% RFT:		\$490,248										
\$383,278						Anticipated RF with \$50,000 annual contribution:						
								\$433,278	\$483,278	\$533,278	\$583,278	\$633,278