BOC JOINT WORKS INFRASTRUCTURE & SPECIAL ITEMS SUMMARY- FINAL

Irrigation District 45 (D45) & TID Assets, Prioritization, Budgets and Schedule for Improvements and Maintenance

14 October, 2015

The intent of this document is to inventory all of the Joint Works Assets, area of improvements and maintenance and new equipment "SPECIAL ITEMS". Additionally this summary provides budgeting and prioritization of said special items. This was produced through mutual effort from individuals of the TID, WRVID #45 as well as BOC representatives and staff. This document can be used in the following years and be updated annually as all formatting and tracking is made integral. This is to be a visual representation of the current condition of the infrastructure as well as to outline current and future needs as well as being a technical summary.

Organization:

The order of the photos, descriptions, budgets etc. all follow the "Wood River Valley Irrigation district #45 and Triangle Irrigation District Joint Works map."

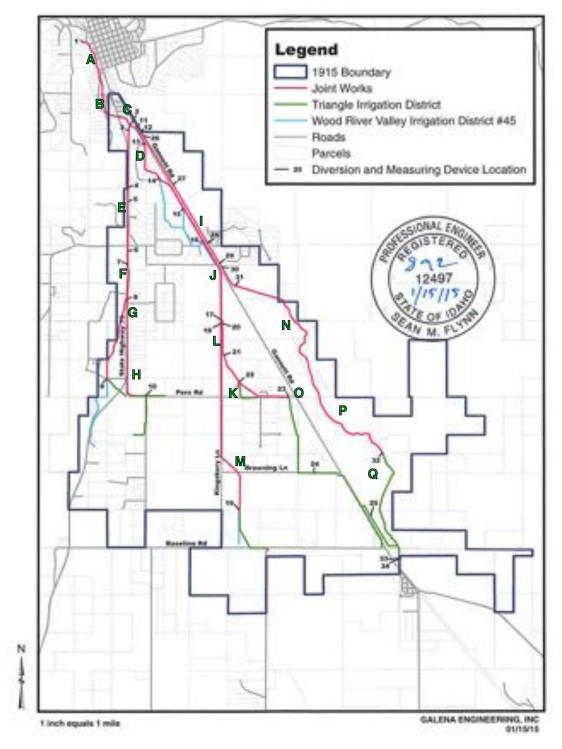
Budgets of "SPECIAL ITEMS" -Repairs/Upgrades/ Maintenance/ New Equipment:

Special Projects/Upgrades (Items 1-32) -In all instances other than routine maintenance of tree/bush cutting, herbicide application, burning etc. cost estimate pricing is from 3rd Party Subcontractors. The BOC may be able to have it's own staff perform many of the repairs/upgrades "in-house" in its entirety, with labor, or in tandem with subcontracts for financial savings.

Special Maintenance (Items A-Q)- On the attached Google Earth photos areas are defined be lettered nomenclature on the "Wood River Valley Irrigation district #45 and Triangle Irrigation District Joint Works map." These areas have work descriptions pertaining to special projects with budgets and prioritization. Additionally a new seed program for reseeding after burning of weeds as well as a annual limited budget for excavator service is proposed and noted at the end the end of this section

New Equipment- This category is for a new truck, brush hog, weed sprayer or similar suggested equipment to make work done easier, more quickly and for less money.

WOOD RIVER VALLEY IRRIGATION DISTRICT #45 AND TRIANGLE IRRIGATION DISTRICT JOINT WORKS



I. "SPECIAL ITEMS" Infrastructure /Repairs/Upgrades

1a. Main Gate

Condition: Entire main gate steel, concrete etc. is in good condition

Repairs/upgrades: Major leaks at north gate, long-term painting. The assumption is that by fixing the gate the earthen berm annually would not be needed.

Schedule Recommendations: Gate repair 2016 Painting in a few years



LOCATION #	REPAIR/UPGRADE	CURRENT (REPLACEMENT) VALUE	BUDGET OF REPAIR/ UPGRADE	PRIORITY
1a.1	MAINTENANCE PAINTING	\$120,000	\$400	2017
1a.2	NORTH GATE REPAIR	\$0	\$0	2017

1b. Main Gate Area –Retaining Wall

Condition: Good condition- has public falling concern

Repairs/upgrades: Install No Trespassing signs. Continue to maintain wall until failure, then install a poured concrete wall.

Schedule Recommendations: Longterm, 4 years+



LOCATION #	REPAIR/UPGRADE	CURRENT (REPLACEMENT) VALUE	BUDGET OF REPAIR/ UPGRADE	PRIORITY
	CONCRETE RETAINING			
1b.1	WALLS	\$12,000	\$15,000	2019
1b.2	NO TRESSPASSING SIGNS	\$0	\$68	2016

1c. Main Gate Area –River Retaining

Condition: Fair condition- has public falling concern, is eroding and will need to be amended

Repairs/upgrades: Demo and install new Concrete Retaining Wall

Schedule Recommendations: Longterm, 3+ years



		CURRENT (REPLACEMENT)	BUDGET OF REPAIR/	
LOCATION #	REPAIR/UPGRADE	VALUE	UPGRADE	PRIORITY
1c	DEMO- NEW RIP RAP	\$9,000	\$6,500	2019

1d. Main Gate Area -Bridge

Condition: Fair condition- has public and staff safety concerns.

Repairs/upgrades: OWNED BY D37. The BOC should recommend they have safety gates installed on each end similar to main gate.

Schedule Recommendations: Safety end gates for the public next season.



1e. Main Gate Area – Monitor Station

Condition: Good condition- no upgrades necessary

Repairs/upgrades: none

Schedule Recommendations: OWNED BY D37.



1f. Main Gate Area – Concrete Debris Clean up

Condition: N/A

Repairs/upgrades: none

Schedule Recommendations: Coordinate with other excavation project that has haul away- such as ditch retaining



		CURRENT	BUDGET OF	
		(REPLACEMENT)	REPAIR /	
LOCATION #	REPAIR/ UPGRADE	VALUE	UPGRADE	PRIORITY
1f	NONE	\$0	\$500	2018

BOC Joint Works Infrastructure Summary

1g. Main Gate Area – New Gate and Signage

Condition: Fair

Repairs/upgrades: Re-align posts and improve cable attachment/locking and add signage, consider a swing gate

Schedule Recommendations: 2016



LOCATION #	REPAIR/ UPGRADE	CURRENT (REPLACEMENT) VALUE	BUDGET OF REPAIR/ UPGRADE	PRIORITY
1g	ALIGN COLUMNS, NEW ATTACHMENTS, SIGNAGE	\$650	\$73	2016

2a. Ed's Drop – Spill Pool/Seepage

Condition: poor

Repairs/upgrades: Fill and pour concrete slab or install liner in the entire 100' vicinity

Schedule Recommendations: 2016



LOCATION #	REPAIR/ UPGRADE	CURRENT (REPLACEMENT) VALUE	BUDGET OF REPAIR/ UPGRADE	PRIORITY
2a	CONCRETE SLAB ENTIRE SPILL AREA	\$20,000	\$34,000	2019

BOC Joint Works Infrastructure Summary

2b. Ed's Drop-Bridge

Condition: fair

Repairs/upgrades: new planks should be installed and others resecured

Schedule Recommendations: 2016



		CURRENT	BUDGET OF	
		(REPLACEMENT	REPAIR /	
LOCATION #	REPAIR/ UPGRADE) VALUE	UPGRADE	PRIORITY
	NEW PLANKS, RE-SECURE			
	OTHERS + NO TRESSPASSING			
	SIGNS- BUDGET IN GENERAL			
2b	MAINTENANCE	\$400	\$0	2016

2c. Ed's Drop-Gates

Condition: Good

Repairs/upgrades: Need new walking planks installed. Safety end gates recommended long-term

Schedule Recommendations: 2016 and 2019



LOCATION #	REPAIR/UPGRADE	CURRENT (REPLACEMENT) VALUE	BUDGET OF REPAIR/ UPGRADE	PRIORITY
2c	NO REPAIR- GATE STRUCTURE	\$32,000	\$0	N/A
	NEW WALKING PLANKS - COVERED	* ~	* •	0040
2c	IN GENERAL MAINTENANCE BUDGET	\$0	\$0	2016
2c	NEW SAFETY FENCE GATES	\$0	\$600	2019

2d. Ed's Drop OWNED BY MATT THORTON

Condition: Bad

Repairs/upgrades: Need to remove old not used conc. structure- rumor is that this is the property owners and that they will remove

Schedule Recommendations: N/A



3. Hwy. 75 Staff Gauge

Condition: Good

Repairs/upgrades: N/A

Schedule Recommendations: N/A



LOCATION #	REPAIR/ UPGRADE	CURRENT (REPLACEMENT) VALUE	BUDGET OF REPAIR/ UPGRADE	PRIORITY
3	N/A	\$3,500	\$0	N/A

4. Meyers Diversion

Condition: Fair

Repairs/upgrades: Needs new wider walking planks securely mounted. Future repair of failed wing wall

Schedule Recommendations: 2016 & 2019



		CURRENT	BUDGET OF	
		(REPLACEMENT)	REPAIR /	
LOCATION #	REPAIR/UPGRADE	VALUE	UPGRADE	PRIORITY
4	EXISTING STRUCTURE	\$3,000	\$0	N/A
	NEW WALKING PLANKS - COVERED IN GENERAL MAINTENANCE BUDGET	\$0	\$0	2016
4	NEW WING WALL/REPAIR	\$0	\$900	2019

5. Silver Creek Farms Check

Condition: Good

Repairs/upgrades: New/ Secure planks

Schedule Recommendations: 2016



LOCATION #	REPAIR/ UPGRADE	CURRENT (REPLACEMENT) VALUE	BUDGET OF REPAIR/ UPGRADE	PRIORITY
	NEW PLANKS- COVERED IN GENERAL MAINTENANCE BUDGET	\$3,500	\$0	2016

8. Walker Diversion

Condition: poor

Repairs/upgrades: Needs new planks, Metal gate and head gate repair, New check on main channel, Excavate fill at Walker side

Schedule Recommendations: 2016 & 2017



LOCATION #	REPAIR/UPGRADE	CURRENT (REPLACEMENT) VALUE	BUDGET OF REPAIR/ UPGRADE	PRIORITY
8	EXISTING STRUCTURE	\$17,000	\$0	N/A
8	NEW METAL GATE, FRAME OF GATE REPAIR	\$0	\$1,500	2017
	NEW PLANKS/ CHECK BOARDS- COVERED IN GENERAL MAINTENANCE BUDGET. EXCAVATE			
8	GRAVEL ON WEST SIDE PER ITD	\$0	\$0	2016

9. Walker South

Condition: Fair

Repairs/upgrades: Need to make closure to old TID leg

Schedule Recommendations: 2016



LOCATION #	REPAIR/UPGRADE	CURRENT (REPLACEMENT) VALUE	BUDGET OF REPAIR/ UPGRADE	PRIORITY
9	EXISTING STRUCTURE	\$1,200	\$0	N/A
9	NEW CONC. STRUCTURES	\$0	\$1,500	2017

10. Pero "T"

Condition: Very Good

Repairs/upgrades: None

Schedule Recommendations: N/A



		CURRENT	BUDGET OF	
	REPAIR /	(REPLACEME	REPAIR /	
LOCATION #	UPGRADE	NT) VALUE	UPGRADE	PRIORITY
10	N/A	\$7,500	\$0	N/A

11. Gannett Diversion

Condition: Fair

Repairs/upgrades: Need to secure planks, (2) bays need Metal gates installed, Need to fix concrete cracks/leaks, Center diverters need concrete reinforcement as well as spillways

Schedule Recommendations: 2016 & 2018



		CURRENT (REPLACEMENT)	BUDGET OF REPAIR/	
LOCATION #	REPAIR/UPGRADE	VALUE	UPGRADE	PRIORITY
11	EXISTING STRUCTURE	\$49,000	\$0	N/A
	METAL GATES FOR (1) BAYS & CONC.			
11	PLUG- MAY INVOLVE ITD	\$0	\$3,000	2017
	SECURE PLANKS- COVERED IN			
11	GENERA LMAINTENANCE BUDGET	\$0	\$0	2016
11	FIX CONC. LEAKS	\$0	\$150	2017
	REPAIR CENTER DIVERTERS, CONC.			
11	SPILLWAY	\$ 0	\$2,500	2018

12. W. Gannett/ Kingsbury Parshal Flume

Condition: Good

Repairs/upgrades: None

Schedule Recommendations: N/A



		CURRENT	BUDGET OF	
	REPAIR /	(REPLACEME	REPAIR /	
LOCATION #	UPGRADE	NT) VALUE	UPGRADE	PRIORITY
12	N/A	\$7,800	\$0	N/A

14. Bellevue Farms North

Condition: Good

Repairs/upgrades: Fix Cracks, New Planks and drop panels, Make Metal gate at Diversion,

Schedule Recommendations: 2016,2018



LOCATION #	REPAIR/UPGRADE	CURRENT (REPLACEMENT) VALUE	BUDGET OF REPAIR/ UPGRADE	PRIORITY
14	EXISTING STRUCTURE	\$16,500	\$0	N/A
14	METAL GATE FOR (1) BAY	\$0	\$750	2018
14	CONC. SLAB AT DROP	\$0	\$1,200	2018
	NEW PLANKS/ FIX CRACKS/ PANEL			
	INSERTS- COVERED IN GENERAL			
14	MAINTENANCE BUDGET	\$0	\$0	2016

15. Bellevue Farms South

Condition: Good

Repairs/upgrades: Make seats for drop boards

Schedule Recommendations: 2017



LOCATION #	REPAIR/UPGR ADE	CURRENT (REPLACEMENT) VALUE	BUDGET OF REPAIR/ UPGRADE	PRIORITY
15	EXISTING STRUCTURE	\$3,400	\$0	N/A
	SLOTS FOR DROP			
15	PLANKS	\$0	\$200	2017

16. Bellevue Farms Drop

Condition: Fair

Repairs/upgrades: Long-term may need cobble fill or conc. repair

Schedule Recommendations: N/A



		CURRENT	BUDGET OF	
	REPAIR/	(REPLACEMENT)	REPAIR/	
LOCATION #	UPGRADE	VALUE	UPGRADE	PRIORITY
16	N/A	\$7,500	\$0	N/A

17. Struthers North

Condition: Fair

Repairs/upgrades: New Planks, (1) New metal gate, (2) metal frame for gates

Schedule Recommendations: 2016 & 2017



		CURRENT (REPLACEMENT)	BUDGET OF REPAIR/	
LOCATION #	REPAIR/UPGRADE	VALUE	UPGRADE	PRIORITY
17	EXISTING STRUCTURE	\$16,500	\$0	N/A
17	METAL GATE FOR (1) BAY, METAL FRAME FOR (2) GATES AT TOP	¢۵	\$1.850	2017
17	NEW PLANKS- COVERED IN GENERAL	φυ	\$1,000	2017
17	MAINTENANCE BUDGET	\$0	\$0	2016

18. Struthers Gauge West

Condition: Good

Repairs/upgrades: New Planks

Schedule Recommendations: 2016



LOCATION #	REPAIR/UPGRADE	CURRENT (REPLACEMENT) VALUE	BUDGET OF REPAIR/ UPGRADE	PRIORITY
18	EXISTING STRUCTURE	\$4,500	\$0	N/A
18	NEW PLANKS- COVERED IN GENERAL MAINTENANCE BUDGET	\$0	\$0	2016

19. Baseline Divide

Condition: Poor

Repairs/upgrades: Need Gate to D45 ditch, (1) closure going east. Need from private users Stevenson Diversion Gate and Jarmuz Gate.

Schedule Recommendations: 2016



LOCATION #	REPAIR/UPGRADE	CURRENT (REPLACEMENT) VALUE	BUDGET OF REPAIR/ UPGRADE	PRIORITY
19	EXISTING STRUCTURE	\$12,000	\$0	N/A
19	(1) CLOSURE, FOR EAST LEG & (1) GATE	\$0	\$600	2017
19	NEW PLANKS- COVERED IN GENERAL MAINTENANCE BUDGET	\$0	\$0	2016

20. Struthers Gauge East

Condition: Good

Repairs/upgrades: Get re-certified for future use

Schedule Recommendations: 2018



	REPAIR /	CURRENT (REPLACEMENT)	BUDGET OF REPAIR/	
LOCATION #	UPGRADE	VALUE	UPGRADE	PRIORITY
20	N/A	\$4,500	\$1,200	2018

21. Struthers Pond PRIVATELY OWNED

Condition: Fair

Repairs/upgrades: Need to install a proper check .Concrete with concrete entrance/spillway

Schedule Recommendations:



22. Rinker's Pit

Condition: Good

Repairs/upgrades: Needs new wider walking planks securely mounted.

Schedule Recommendations: 2016



LOCATION #	REPAIR/ UPGRADE	CURRENT (REPLACEMENT) VALUE	BUDGET OF REPAIR/ UPGRADE	PRIORITY
22	CONC. APRON		\$750	2017
	NEW PLANKS, SECURE - COVERED IN GENERAL			
22	MAINTENANCE BUDGET	\$12,000	\$0	2016

BOC Joint Works Infrastructure Summary

23. Beck's Diversion PRIVATELY OWNED/TID

Condition: Good

Repairs/upgrades: New planks, Needs a private diversion installed

Schedule Recommendations:



26. Rinker Diversion PRIVATELY OWNED

Condition: Good

Repairs/upgrades: None to Drop, Remove Concrete chunk on side of ditch

Schedule Recommendations: 2018



27. Gannett East Staff Gauge

Condition: Very Good

Repairs/upgrades: None

Schedule Recommendations: N/A



		CURRENT	BUDGET OF	
	REPAIR /	(REPLACEMENT)	REPAIR /	
LOCATION #	UPGRADE	VALUE	UPGRADE	PRIORITY
27	N/A	\$4,500	\$0	0

28. Griffin Ranch PRIVATELY OWNED Condition: Very Good

Repairs/upgrades: None

Schedule Recommendations: N/A



		CURRENT		
	REPAIR /	(REPLACEMENT)	BUDGET OF	
LOCATION #	UPGRADE	VALUE	REPAIR/ UPGRADE	PRIORITY
28	N/A	\$8,500	\$0	N/A

29. Cove Staff Gauge

Condition: Very Good

Repairs/upgrades: None

Schedule Recommendations: N/A



LOCATION #	REPAIR/ UPGRADE	CURRENT (REPLACEMENT) VALUE	BUDGET OF REPAIR/ UPGRADE	PRIORITY
29	N/A	\$4,500	\$0	N/A

31. Cove Diversion

Condition: Very Good

Repairs/upgrades: None

Schedule Recommendations: N/A



	REPAIR/	CURRENT (REPLACEMENT)	BUDGET OF REPAIR/	
LOCATION #	UPGRADE	VALUE	UPGRADE	PRIORITY
31	N/A	\$3,200	\$0	N/A

I. "SPECIAL ITEMS" Continued

Special Maintenance

Note: All areas of these maps will have annual general maintenance with burning, herbicides, chipping, etc. This category is only listing Special Maintenance projects.



A. HOWARD PRESERVE

Removal of Large trees/Provide access to one side of the ditch in this area. It is understood that this is a sensitive area as a park/preserve. Coordination with the stakeholders is necessary. Long-term plan for a few trees per year is recommended on one side of the ditch only and in intermittent areas. The budget per tree removal is approx. \$500/tree. The 2016 year the City of Bellevue will begin removing around (10) problematic trees. It is suggested to removed (3) trees per year for an annually over a (10) year plan starting in 2017.

LOCATION #	REPAIR/ UPGRADE	TREES PER YEAR	ANNUAL BUDGET OF MAINTENANCE	PRIORITY
	REMOVE OF TREES			
А	FOR ACCESS	3	\$1,500	2017



B. GLEN ASPEN

Removal of Large trees/Provide access to one side of the ditch in this area. It is understood that this is a sensitive area as a park/preserve. Coordination with the stake holders is necessary. Long-term plan for a few trees per year is recommended on one side of the ditch only and in intermittent areas. The budget per tree removal is approx. \$500/tree. The 2016 year the City of Bellevue will begin removing around (10) problematic trees. It is suggested to removed (3) trees per year for an annually over a (10) year plan.

LOCATION #	REPAIR/ UPGRADE	TREES PER YEAR	ANNUAL BUDGET OF MAINTENANCE	PRIORITY
	REMOVE OF			
	TREES FOR			
В	ACCESS	3	\$1,500	2018



C. ED'S DROP

Removal of Large trees / debris consolidation with aide from excavator company done annually for (2) years for work in this area as well as a few other locations noted later. For this upcoming season a lump sum fee is applied for minor stump removal and prep for burning to finish work started many years past.

LOCATION #	REPAIR/ UPGRADE		EXCAVATOR SERVICE ANNUAL FEE	PRIORITY
С	MINOR STUMP REMOVAL/ PREP FOR BUNRING		\$500	2016



D. LABRADOR LANE

For this upcoming season a lump sum fee is applied for minor stump removal and prep for burning to finish work started many years past.

LOCATION #	REPAIR/ UPGRADE		EXCAVATOR SERVICE ANNUAL FEE	PRIORITY
D	MINOR STUMP REMOVAL/ PREP FOR BURNING		\$500	2016



E. NORTH QUARTER HORSE

For this upcoming season a lump sum fee is applied for minor stump removal and prep for burning to finish work started many years past.

LOCATION #	REPAIR/ UPGRADE		EXCAVATOR SERVICE ANNUAL FEE	PRIORITY
E	MINOR STUMP REMOVAL/ PREP FOR BURNING		\$500	2016



F. GLENDALE ROAD

Additional of freeboard gravel in a small area along Highway 75. General annual maintenance covers this area and entails: herbicide, weed/brush removal, chipping, burning, seeding.

LOCATION #	REPAIR/ UPGRADE	EXPENSE	PRIORITY
	ADD MORE DITCH FREEBOARD-		
	INCL IN GENERAL MAINTENANCE		
F	BUDGET	\$0	2016
F	N/A	\$0	N/A



G. DERBY ROAD

LOCATION #	REPAIR/ UPGRADE	EXPENSE	PRIORITY
G	N/A	\$0	N/A



H. PERO ROAD

LOCATION #	REPAIR/ UPGRADE	EXPENSE	PRIORITY
Н	N/A	\$0	N/A



I. GRIFFIN RANCH

LOCATION #	REPAIR/ UPGRADE	EXPENSE	PRIORITY
I	N/A	\$0	N/A



J. KINGSBURY/GANNET

For this upcoming season a lump sum fee is applied for minor stump removal and prep for burning to finish work started many years past. General annual maintenance covers this area and entails: herbicide, weed/brush removal, chipping, burning, seeding.

LOCATION #	REPAIR/ UPGRADE	EXPENSE	PRIORITY
	MINOR STUMP		
	REMOVAL AND PREP		
J	FOR BURNING	\$500	2016



K. Rinker's Pond

For this upcoming season a lump sum fee is applied for minor stump removal and prep for burning to finish work started many years past.General annual maintenance covers this area and entails: herbicide, weed/brush removal, chipping, burning, seeding.

LOCATION #	REPAIR/ UPGRADE	EXPENSE	PRIORITY
	MINOR STUMP		
	REMOVAL AND PREP		
K	FOR BURNING	\$500	N/A



L. KINGSBURY ROAD

LOCATION #	REPAIR/ UPGRADE	EXPENSE	PRIORITY
L	N/A	\$O	N/A



M. BROWNING

LOCATION #	REPAIR/ UPGRADE	EXPENSE	PRIORITY
М	N/A	\$0	N/A



N. Cove North

LOCATION #	REPAIR/ UPGRADE	EXPENSE	PRIORITY
N	N/A	\$0	N/A



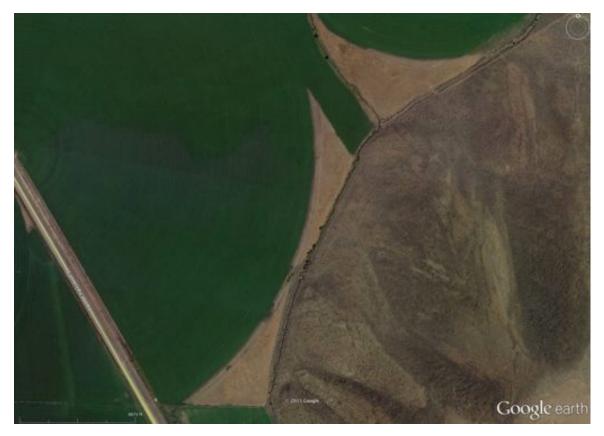
O. Pero Road East

LOCATION #	REPAIR/ UPGRADE	EXPENSE	PRIORITY
0	N/A	\$0	N/A



P. Cove Middle

LOCATION #	REPAIR/ UPGRADE	EXPENSE	PRIORITY
Р	N/A	\$0	N/A



Q. Cove South

LOCATION #	REPAIR/ UPGRADE	EXPENSE	PRIORITY
Q	N/A	\$0	N/A

I. "SPECIAL ITEMS" Continued New Equipment

- **Brush hog:** This item will increase efficiency of annual ditch maintenance for cutting of bushes, saplings and grass. Time of use is estimated at over (40) hours of annual use and compared to \$50/hour for rental this is a 1 ¹/₂" year payback.
- **Boom Herbicide Sprayer:** This item is recommend for a truck bed install with booms for access to either side of the truck along with a manual hand sprayer. This item will increase efficiency of annual ditch maintenance for cutting/burning of bushes, saplings and grass
- **Wood Chipper:** This item will reduce the need for large scale burning, will make a chipped mulch which will help with weeds on the banks. The consensus for 2016 is to rent a unit. This expense in noted in the general maintenance budget.
- **New Truck:** A newer used truck that will have reduce maintenance, and be used solely for BOC work, no need for personal vehicle uses.

NEW EQUIPME	NT		
#	ITEM	COST	PRIORITY
1	BRUSH HOG	\$3,000	2017
2	BOOM SPRAYER	\$1,500	2016
	WOOD CHIPPER- RENTAL FEE IN		
3	GENERAL MAINTENANCE BUDGET	\$0	2016
4	TRUCK	\$12,000	2016
5		\$0	