

**SEWARD / BEAR CREEK FLOOD SERVICE AREA
WORK SESSION
SEAVIEW PLAZA BUILDING, SUITE 122
Monday 3 January 2011**

The work session convened at 7:00 PM preceding the SBCFSA regular board meeting.

A. ATTENDANCE

BOARD MEMBERS

Chairman Bill Williamson
Vice Chairman Bob White
Terry Federer
Tena Morgan

STAFF

Christina Stauffer
Service Area Coordinator

B. PURPOSE

The purpose of this work session is to begin project planning for the 2012 fiscal year.

C. SUMMARY

Service Area Coordinator Christina Stauffer began the work session by outlining pending SBCFSA projects, project funds remaining in FY 2011 and funding available for projects as of July 1, 2011. She went on to explain how much money was currently in the fund balance, minimum funds required by the borough and how to access money in the fund balance.

Bill Williamson said that he, Dan and Christina had been discussing various possibilities for projects for the City of Seward. The city does not come to us very often and the board usually has to pull things out of them. At the last meeting when we met with ADOT about the airport we were given the impression that they do not seem to care if the airport washes away or not. The suggestion was made that perhaps the SBCFSA could put away \$20,000 or so in a fund or put armoring on the runway somewhere.

Bob White stated that he agreed with that but said that from ADOT's perspective, if they take money out of their budget it is money out of their budget. If it is a disaster and important infrastructure washes away, the federal government will step in. ADOT then gets a lot of free money and will use that to fix it. They have no motivation to care about prevention. This is pretty much where the city, the borough and the state stand.

Bill Williamson agreed. He added that given the city's reluctance to come up with projects and that fact that the SBCFSA can never seem to fill open city board seats it

**SEWARD / BEAR CREEK FLOOD SERVICE AREA
WORK SESSION
SEAVIEW PLAZA BUILDING, SUITE 122**

is very hard to know what to do for the city residents inside the city limits. We do owe them some mitigation work and are just trying to figure out how to help.

Tena Morgan asked how many people use the Seward Airport. She said she has a problem spreading out the money on little projects, \$20,000 at a time, when the board needs to pool the money to get some real fixes going. One of the reasons she and Dan had gone to the conference in San Diego was to come up with some ideas. Tena said she was totally against putting any money into the airport. As long as the airport is minimally maintained to allow people and material to get in and out of Seward during a disaster that is enough.

Bill Williamson stated that even if there is a major disaster from flooding or tsunami, the airport is not going to make it anyway. The second runway will probably be OK. If we were to lose the highway, relief operations would probably come in via helicopter anyway.

Tena Morgan said that there were many places where the board had not done any projects. Scheffler Creek is on the PAS study we read but we have not talked about anything happening with Scheffler. We need to put our money on the projects that we have ongoing instead of moving to anything new. We spent \$40,000 for the study with the Corps of Engineers. Tena said she believes that the board needs to go with their recommendations and that this is where the money should be spent. They will put up money of their own and are in a position to help us that way. We should not spread our funds any thinner.

Terry Federer said he agreed for the most part. The city is not asking for anything and does not apparently need the money. Terry stated that he thinks the airport is important but on the other hand if all we can do is put in some rip rap or do a little dredging he is not sure this will do any good. The state is putting some money into the airport so he thinks they do care but they are not interested in raising the runway or any long term mitigation that might affect someone else.

Bill Williamson agreed and said he thinks that the Seward airport is just very low on the state's priorities.

Tena Morgan stated that the board would be better responding to the people who have come to meetings in the past asking for help.

Terry Federer asked Dan Mahalak what the cost would be for the gabion baskets he had suggested.

**SEWARD / BEAR CREEK FLOOD SERVICE AREA
WORK SESSION
SEAVIEW PLAZA BUILDING, SUITE 122**

Dan Mahalak replied that the baskets cost \$187 each and were 3 by 3 by 12. There would be additional cost in filling them.

Bob White said that another alternative to that, one he had discussed with Dan, was what was done in Louisiana when they had flooding. They had metal boxes that they filled with dirt and locked together. They were very much like Conex boxes although somewhat smaller. We can get a lot more bang for our buck if we buy 15 Conex boxes at \$2,000 each and went out there at a specific point on Kwechak Creek, cut off the tops and filled them with gravel and chained them together. It would be a lot faster and a lot cheaper and more functional. It would always be a 40 foot barrier and not just a bank of gravel. Even if they sink you can put more on top of them. It would protect 50 homes and would last just as long as a gabion basket. It would create a real levee. We could do that on Box Canyon as well but we would need permissions there from everyone. If we dump the \$45,000 that we have now and dump it in one spot on Kwechak it would protect 40 to 50 homes in there. Another project that we could do would be to create more space under Nash Road. More passage is needed there as Nash Road backs up water far up the drainage. In terms of transportation corridor safety, if we cannot keep Salmon Creek flowing under Nash Road it will back up over the highway and will take the highway out. We need to deal with this more aggressively and so far have not had much help from the other side of the peninsula in getting our wish lists promoted.

Terry Federer said he thinks we should focus on the two main projects that have already been identified and that is Box Canyon and Kwechak Creek.

Bill Williamson agreed that the board could easily spend all the money available in just those two locations as well as on Nash Road. We need to make sure we cover the whole area.

Christina Stauffer reminded board members that there have been challenges in the past from Philip Oates regarding the city getting their share of SBCFSA mitigation funds and that is might be important to continue to seek a project inside the city limits. We have been asked in the past, “what have you spent on the city?” Dan’s time is part of what the board has contributed to the city.

Tena Morgan pointed out that the city will benefit from the PAS study that the SBCFSA laid out \$40,000 for but did not contribute toward the cost.

Terry Federer said that he definitely feels the board should spread the wealth but the city does not seem very interested in suggesting a project or asking for assistance.

**SEWARD / BEAR CREEK FLOOD SERVICE AREA
WORK SESSION
SEAVIEW PLAZA BUILDING, SUITE 122**

Tena Morgan stated that if Mr. Oates comes to the meeting we should ask him if they have a project in mind. The city is more than welcome to come to our meetings and ask just like everyone else. If we are going to do work for the city why not at Lowell Creek outflow?

Bob White pointed out that Lowell Creek Bridge has just finished being repaired. He also stated that there is a side benefit from dealing with Salmon Creek as it protects the highway which is the only way into the city. We can say that a pretty good percentage of what we do, especially in the lower reaches of Salmon Creek benefits the city as well. Improving water passage under Nash Road should be a priority as it provides water a way directly to the bay rather than having it back up at Preacher's Pond over the highway. That is the low point in the road now and it is very likely that the road will be cut off in a flood event if nothing is done.

Tena Morgan asked what areas usually flood in the city limits.

Bob White replied that Japp Creek was going to get a lot of help this year because the gravel for the levee road is coming out of there. Scheffler Creek floods which affects Dairy Hill, the horse pasture and Kenai Fjords Tours property. There would be benefit to doing some work there but the city is not asking for it. The board could always fall back on the fund balance which is just sitting there. If it cost \$85,000 to put a box culvert under Salmon Creek Road it might behoove us to spend \$125,000 in that area to expand the passage under Nash Road.

Tena Morgan pointed out that these are things the board has discussed already.

Bill Williamson said that if dredging is planned under Nash Road we will have to get state permission because that is a state road. They have not indicated they are particularly willing to work with us.

Dan Mahalak pointed out that the permitting for work on Salmon Creek was already in place. He drew attention to the map that shows designated reaches for Salmon Creek on this permit. Salmon Creek is navigable so there would be a fee for gravel removed.

Discussion was held regarding gravel fees and storage in the floodplain.

Tena Morgan recalled the suggestion from a previous meeting that the board purchase property on Salmon Creek for gravel storage purposes.

Terry Federer said it was still not legal to store gravel in the floodway.

**SEWARD / BEAR CREEK FLOOD SERVICE AREA
WORK SESSION
SEAVIEW PLAZA BUILDING, SUITE 122**

Discussion was held regarding buying the property and possible dredging methods for lower Salmon Creek that would allow free flow.

Bob White stated that there was dozer work done there in the past that pushed up gravel to separate the Resurrection River from Salmon Creek although we do not know exactly who this.

Dan Mahalak added that there is a space with a volume of 28,000 cubic yards that can be used for gravel for the railroad. It would accommodate \$320,000 worth of fill. That is based on cost for harvest and haul within 10 miles.

Bill Williamson said that he just wanted to be sure that we did not run into any problems with the state at the last minute.

Dan Mahalak commented that he did not think this would require state permission other than to be sure whatever was done did not create scour at the bridge. We would have to work through the borough's flood program to prove that there is a no rise. If we wait too long and the new maps become effective it could become a bit more challenging.

Bill Williamson stated that he wanted board members to be thinking about these projects for FY2012. Starting in July we will have \$60,000 available in Contract Services.

Dan Mahalak reminded the board that after July 1st there would be only 15 days left in the fish window for projects done this year on anadromous streams. If the board gives the go ahead, Dan said, he could get all the ducks lined up and be ready to send the equipment in as soon as the money was available.

Sue Wilcox asked to be recognized and informed the board that it was also possible, if the board had a certain window of time in which to accomplish a project, to take money from the fund balance and then replace it. It would still require assembly approval which would take about 30 days.

Terry Federer asked how many Conex boxes it would take to do the work on Kwechak levee.

Bob White replied that he thought 15 would be enough. It is about 600 feet.

Tena Morgan asked if dredged material could just be loaded into the Conex boxes and not considered to be left in the floodplain. This sounds like the best idea so far.

**SEWARD / BEAR CREEK FLOOD SERVICE AREA
WORK SESSION
SEAVIEW PLAZA BUILDING, SUITE 122**

Bob White said that the same thing could be done on Box Canyon although it would involve permission from CIRI and the US Forest Service. Surge release flooding there can produce a 10 foot wall of water which loaded Conex containers would definitely slow down.

Bill Williamson asked Dan if he saw any problem with this idea.

Dan Mahalak replied that he could definitely see problems with the idea but that it was worth pursuing. He said he was not sure how the property owners on Box Canyon would view rusty old Conex boxes in the stream. Trying to get CIRI to buy off on that would definitely be challenging.

Maps were studied regarding locations on Kwechak for a possible Conex project. The location and the status of the current levee was indicated.

Tena Morgan commented that she was determined to only look at long term projects rather than continue nickel and diming the budget to death with bandaid work.

Dan Mahalak used the projected view to point out physical features in the area, the levee and roads. He indicated lines of elevation change and water flow and stated that the stream here is high velocity. This might be a problem with impermeable materials like Conex boxes versus permeable gabion baskets. Dan discussed various gabion baskets and their uses and presented pictures for the board. He pointed out another small stream that currently flows into Sawmill Creek but will probably move over into Kwechak and add to its flow in the future. Since the board is responsible for placing the current levee as it is now. He went on to describe the levee configuration and hydrologic considerations for this. He said that it was important to consider levee strength at the top as well as at the j-hook end.

Bob White indicated another knob northwest of the current levee where 600 feet of Conex containers would provide at least a foundation for a longer term fix. Maybe something will come up in the future to extend the life of this kind of project. Old cars were used very successfully in the past.

Randy Stauffer asked to be recognized and pointed out that Conex containers would last longer in fresh water than salt water.

Bob White agreed and added that scour would be the biggest problem and that gravel would eat the steel away eventually.

Discussion was held regarding the benefit of one location over another.

**SEWARD / BEAR CREEK FLOOD SERVICE AREA
WORK SESSION
SEAVIEW PLAZA BUILDING, SUITE 122**

Bob White said that he disliked the idea of pinching the stream down to a narrow channel because, although it increases velocity, it makes it more difficult to keep the stream in place.

Dan Mahalak commented that if the top of the levee was the most susceptible to scour and erosion so it was important to armor it.

Further discussion was held regarding the hydrological impact of one location over another.

Dan Mahalak went on to say that looking at this project or any other structural solution, we are currently working with the Corps of Engineers. Dan said his suggestion would be to delay making any decision regarding the \$60,000 until we see what shakes loose from the PAS study. Through the 205's we have requested there may be federal money available if we wait until we see what they suggest. Dan drew attention to the PAS Study Report in the packet and pointed out that there are already some suggestions from the Corps for structural and non-structural mitigation projects. Their suggestions include storage facilities and debris basins, diversion structures and dikes as well as buyouts and floodproofing.

Bill Williamson said that he believes that it is clear what we need to do at the next meeting which is to determine what projects we want to address and how to spend our money.

The work session was concluded at 7:35 PM.

Christina Stauffer

Secretary

Work Session Notes Approved: 7 March 2011
Date of Approval