



# Memorandum

To: Skagit County Commissioners  
From: Larry Kunzler  
CC: Skagit County Public Works Dept. Staff  
Date: April 18, 2005  
Re: Comments on Public Meeting April 12, 2005

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## ASSIGNMENT

At the end of the above referenced public meeting County Commissioner Chairman, Don Munks, asked me to prepare a memo regarding what I had heard at the public meeting and submit my comments in writing on how I felt about what was said and offer any suggestions with respect to where the County has been, is now, and where the County should go with respect to any proposed flood control project the County might pursue in the future.

## OPENING STATEMENT

I would like to state that I consider it an honor to be able to address the Commission in this manner. I don't think that I have ever attended a more productive meeting on the flood issue since I first became involved with this issue back in 1975. All the cards were put out on the table and everyone's concerns were stated professionally. If the meeting had one underlying theme that could be summed up in one word it would have to be frustration. The main issues that I came away with and would like to address in this memo would be the following:

1. The Frustration Factor
2. Staffs Performance
3. Decision To Hire PIE
4. Need For Accurate Data
5. FERC Process
6. Corps Process
7. Identify Priorities and Projects
8. Where Do We Go From Here

### The Frustration Factor

The one underlying theme throughout the entire meeting was that **all parties** involved in the Skagit River flood issue have reached a point where everyone is frustrated at the lack of progress on this



issue. Staff is frustrated with federal agencies, PSE, and the Tribes. The Commission is frustrated with the amount of money and time that has been spent on this issue with apparently little if anything to show the taxpayers what they have received for the 6.5 million dollars that has been spent since the year 2000. Federal agencies, PSE, the Tribes (at least one of them) are frustrated with the County allegedly not following protocol. Elected officials (both state and federal) are washing their hands and walking away from the issue if not playing politics with it, and I might add that perhaps the taxpayers themselves are asking the question, is there a light at the end of the tunnel on this issue.

As an individual who has been involved with the flood control issue for the past 30 years I would have to state that my frustration level was to the point that I even considered retiring from the issue altogether. However, I've never been a quitter, and I hope that the Commissioners and staff do not give up on this issue either. There is simply too much at stake not only for the residents of Skagit County but the American taxpayer as well.

I think that the level of frustration has had its roots in, and can be summed up in, one word.....communication. All parties need a better understanding of each others position and certainly need to communicate that to each other in a more precise, informative and formal manner. The most telling point supporting that statement was when it was revealed that the Commissioners were totally unaware of the FERC process not being the final word on flood control storage. No matter what FERC decides, their decision is (and has been in the past) subject to the "Corps Process", which may or may not (and has not in the past) supported the allocation of the storage amount authorized by FERC. Clearly someone dropped the ball.

If frustration was the underlying theme at the meeting, communication and how to improve it will be the underlying theme of this memorandum. This will not be an exercise in finger pointing but an exercise in identifying problems and offering suggestions on how they can better be handled in a more efficient manner.

### Staffs Performance

I firmly believe that Skagit County has assembled the most qualified staff that it has ever had in the Public Works Department. Chal Martin's leadership abilities are unquestionable if not impeccable. Staffs dedication to the flood issue and its resolve is unquestionable. However, as was very evident at the meeting that does not mean that there is not room for improvement.

So if staff is dedicated to resolving the flood issue, **how did the frustration factor become such a looming cloud over the decision making process.** I feel that it can be traced back to 1993 when it was publicly announced, not once, but several times over the years that, "This is Skagit County's project and Skagit County is in charge." This position unfortunately sent the wrong message to all other entities involved with the flood issue. I understand why the statement was made, there were lingering perceptions over what transpired in 1979 when the voters overwhelmingly defeated the proposed flood project and the "governmental process" was the scapegoat. However, it is hard to build bridges with your "partners" when you announce that you are in charge when your partners are footing 70% of the bill. Staff needs to realize that the project might be built in Skagit County but it is the American taxpayer and the agencies that represent them who are footing the majority of the bill.

The most telling document I have been able to locate which clearly shows the "frustration factor" at its peak is attached as **Appendix A. (Corps of Engineers "Read-Ahead for 8 May 2003 Meeting With Skagit County")**. To say that our "70% partner" was upset with the County would be a mild understatement. It is clear by this document that communication had broken down and reached a point where the frustration factor had taken over. It is also just as clear that this document "poisoned the well" so to speak before the Skagit County delegation ever made it to Seattle. I have spoken to several people who attended that meeting who at the time (on the Skagit County side) were totally unaware of the document and were shocked at the reception they received by the Colonel at the



Corps. Clearly, County staff and the Corps staff need to do a better job of communicating with each other. Staff differences should be ironed out before the decision makers meet with each other.

Staff needs to realize that they are **not just dealing with another federal agency**. They are dealing with the United States Army. For those of us who have spent time in the military we can attest to the fact that it is a different world there then any other place you can go to. Chain of command is everything to those people. Pomp and circumstance is a way of life to them.

Staff needs to realize that when lower echelon County staff meets with lower echelon civilian staff at the Corps that they cannot leave the meeting feeling like they have received the Corps blessing. As one Corps official recently put it to me, "Unless there is a ceremony, there is no deal." Everything must be put in writing and signed at a "ceremony".

### **Recommendation**

I would respectfully suggest that staff needs to adopt a policy of **memorializing any and all meetings** they attend, telephone calls, e-mails, etc. The federal government refers to this process as "MFR's" (Memorandum For Record). The legal community refers to the process as "Letters of Confirmation". Something to the effect of:

This letter will confirm our meeting yesterday in which the following was discussed.....

It was decided that the following task need to be addressed....

A, C and D will be addressed by us and B and E will be addressed by you.....

A draft copy of the MFR should then be sent to the other entity with a cover letter which states something to the effect of "If we do not hear back from you by this time next week we will assume that we have adequately memorialized our meeting and will proceed accordingly. Once the other entity has responded or lets the time pass then the MFR should be made available to department heads and especially the County Commissioners.

County Commissioners should receive copies of all correspondence and MFR's in a **daily "reading file"**. With the exception of "enclosure letters" all **correspondence and memorandums** should be **signed or acknowledged by department heads or assistant directors**. This sends a message to the receiving entity that they are dealing with authority.

Further, I strongly suggest that the time has come for the County to adopt an **electronic document management system** such as those used by sophisticated law firms. This way if a department head or staff person is unavailable and a Commissioner would like to review the last piece of correspondence or MFR to an entity concerning the flood issue it is a simple matter of calling it up on their computer. In this day and age of electronics there should be no excuse for the Commissioners to not know where staff is on any issue at any time and the Commissioner should never have to leave their office. An excellent example of this is attached Appendix A. Using a software program called ISYS, I was able to query my 6,000 plus electronic documents by using the query "Read-Ahead" and within a split second 36 documents were listed where that term was used. I didn't remember the date of the document but I did remember who authored it. I simply went down the list, called up the document and copied and pasted the document into this memorandum. Total time expended, about 4 seconds.

### **The Decision To Hire PIE**

Shortly after the decision had been made to hire Pacific International Engineering ("PIE") I had the opportunity to have a cup of coffee with a staff member. My reaction was one of complete surprise. I



had been following the Lewis county flood projects since about 1996 when I was invited to speak before a local citizen activist organization by the name of The Chehalis River Council. They had nothing nice to say about the consultant. Subsequent to my presentation I spoke to several federal agency types about PIE. With the exception of PIE's hydrologist Albert Liou they also had few good words to say about PIE. Albert is the consummate gentleman and his grasp of the issues and his ability to understand and analyze them is a tremendous asset. I told the staff member that given what I knew of them what I expected to happen was that PIE would wine and dine the locals, take them on trips to Washington DC and obtain funding for PIE to conduct "studies". Other than that nothing much happens.

In defense of the decision to hire PIE, at the time Skagit County was in dire need of both funding and technological support. PIE supplied both. I think that from a funding and technological perspective PIE has been an asset. However, from a political standpoint with the agency partners, I think it has been a disaster.

### Recommendation

A more thorough background check of consultants should be instituted by County staff. Before one is hired, former clients of the consultant as well as their opponents should be contacted so that the County knows what they are getting into. If PIE is to continue as the County consultant on the flood issue I would recommend that PIE's exposure be limited to County staff and politicians and that contact with federal agencies be extremely limited if at all.

### Need For Accurate Data

On this issue I land squarely on the side of County staff. Based on my extensive document review over the last 110 years of government involvement with the Skagit River flood issue, combined with the absolutely sloppy work products produced by federal agencies within the last two years, I have absolutely no faith in anything any federal agency has produced. This comment is especially directed to the Tacoma Branch of USGS. I feel very strongly that before we beat all our swords back into plow shears the County Commissioners must realize that on some issues we may very well have to take a stand and fight.

Clearly this issue is centered on the use of the "Stewart Reports" by the Corps of Engineers. I have already submitted my "Whitepaper" on this issue and I think successfully publicly defended the paper. USGS's response is highly questionable. I have attached my follow-up memo as Appendix B to substantiate that claim.

When USGS uses terminology like "the 2003 flood marks are all over the place" (Mastin Report) and the following verbiage I don't understand how anyone, the taxpaying public, staff or the Commissioners could place any faith in the Stewart figures.

*Given the uncertainty in the 1921 flood estimates due to many factors, varying these coefficients is little more than a meaningless exercise to tweak the 1921 flood discharge estimate.*

*At this point, knowing the exact location of Stewart's gage heights may be beyond current documentation to clearly identify the actual historical stages.*

*Stewart's study of historical floods in the Skagit River basin had, by today's standards short-comings, simplifications, incomplete documentation, no known photographic documentation, and took decades to review and complete the evaluation of flood hydrology for the Skagit River near Concrete. ([Source: USGS Jarrett Report](#))*



When you combine the above statements with the historical research that Dan Berentson and myself did with the local newspaper articles, as well as the testimony of former County Engineer R.L. Knapp and Colonel Barden of the Corps in 1924, which by the way were **sent to USGS and totally ignored**, I feel that we have raised more than a reasonable doubt as to the validity of the Stewart figures and they should be discarded in favor of substituting the 80 years of gage records that were actually obtained at the bequest of Mr. Stewart. It is Mr. Stewart's "estimates" that are driving the size of the 100 year flood which drives the size of any flood control project which in my opinion has and always will put the cost of the project outside the ability of Skagit County to pay for it.

I've been told by a friend of mine at the Corps that this is probably a non-starter with them. I think we need to be just as adamant that the Corps refusal to reexamine the use of the Stewart data is a non-starter with us. USGS and the Corps have got to realize that **just because they publish an "opinion"** that all you end up with at the end of the day is just that, and opinion. It **doesn't necessarily make it a scientific statement of fact** that when additional information is discovered cannot change, especially when USGS has publicly admitted that the so-called science of hydrology "is anything but an exact science." *(Source: Cindy Barton letter dated 9/7/2004)*

### **Recommendation**

I feel that there is a scientific and technical solution to this dilemma. It is included in Appendix B and restated in part here. We know the exact location of the Burlington levees in 1921. We know the heights of the levees and when they either broke or overtopped in 1921 which was at least 4 feet lower than we experienced in the 1995 flood event. By taking out the fill that has been placed in the floodplain since 1921 and recreating as closely as possible the conditions that existed in 1921 we could run the 1995 flood event as though those conditions existed today. By simulating the levees breaking under those conditions with 1995 flood flows we would be able to ascertain how deep the water would have been in downtown Burlington during the 1995 flood event under 1921 conditions. If that level of water would be as deep or deeper, then clearly the Stewart figures are skewed and should be abandoned in favor of using the 80 years worth of gage data. I have been told by two hydrologists that could be accomplished for as little as \$1,500 dollars. It just might be the best \$1,500 dollars the County has ever spent.

In the alternative, should the Corps balk at this concept, then we should run two hydraulic analysis, one using the Stewart data and one without. Then each would have to be evaluated with respect to cost benefit ratios and the public should be allowed to choose which one they accept.

### **FERC Process**

Again I fall squarely on the side of staff. It is absolutely imperative that the County participate in this process. As Dave Brookings so aptly put it at the meeting, "This Relicensing process will produce a ruling that **we are going to have to live with for the next 50 years.**" The County was remiss in not participating in this process when the Seattle City Light dams went through the Relicensing process a few years ago, in part I understand because it was believed that our 70% partners would look out after our interest, something they clearly did not do. We cannot afford to allow that to happen again. I must admit that when I look at the amount of money that has been spent to date on this process I have a hard time understanding where the money went and perhaps the Commissioners would want an itemized accounting of those expenditures to make that determination.



## Recommendation

If the above listed recommendations are implemented (i.e. the use of MFR's and document management) then the County Commissioners would have a better handle on monetary expenditures and the direction the process is taking. We cannot continue to give consultants blank checks to do the County's business. However, as stated, it is highly recommended that we continue to participate in the process, solicit the support of our legislative representatives, and I would add that we need to involve the public more in this process. **Storage behind existing dams is by far the most cost effective and least environmentally upsetting to all people concerned.** A few hundred to a few thousand letters from Skagit County residents endorsing the concept of additional storage to protect all downstream properties to at least lessen the damages from further flood damage could be a very powerful tool in achieving this goal. I doubt that you would have much trouble getting those kind of letters from the residents of Hamilton, Cockerham Island, Nookachamps, Clear Lake and Sterling and more likely than not Fir Island as well.

## CORPS Process

One of the main points of contention between the Commissioners and staff at the meeting was the fact that no one had evidently informed the Commissioners that no matter what FERC authorizes the Corps of Engineers has the final say on just how much storage will be implemented. This is unfortunate and even approaches the level of inexcusable although I'm not so sure that staff was fully advised that this was indeed the process. It was only through intensive document review that I stumbled onto this even after 30 years involvement with this issue. This is I think an excellent example of the duplicative process that federal agencies go through. It is totally unnecessary and absolutely inefficient. One thing that was not stated by staff at the meeting was that the Corps does not begin its process until the FERC process has completely ran its course. This has been what I feel is one of the main criticisms of PSE, the Tribe, the resource agencies and others of Skagit County not operating inside accepted protocol for the FERC process.

While on the subject of the Corps of Engineers I would be remiss if I did not mention the fact that not only has the Corps lost its credibility with me, staff, and a large segment of the flood community within Skagit County, the Corps has lost credibility nationwide. With scandal after scandal running the gambit from everything from falsifying figures to justify projects, to its handling of the Halliburton contracts, to former high-ranking Corps officials retiring and then becoming lobbyist for the very companies that they do business with. They have lost so much credibility with the American taxpayer that the New York Times in a recent editorial described the Corps as "a fiercely independent agency that operates in what amounts to a parallel universe in Washington, spending billions on public works projects ordered by members of Congress." ([See Appendix C – New York Times editorial, 4/13/05](#)) The Corps has degenerated from the old school mentality of lets build something to the new school that seemingly is more interested in promulgating regulations then building projects. I have no problem on almost a daily basis finding news articles where local governments across the nation are fed up with Corps delays and the seemingly "study it to death" mentality that has become so prevalent in the Corps methodology. Changes clearly need to be made to the way the Corps conducts itself, unfortunately those changes must come from Congress and not local government.

Based on intensive document review it is clear that if the Corps has not intentionally misled Skagit County, something I don't at this point believe they did, they at a minimum **failed to do historical document review** and did in fact mislead Skagit County for almost three decades that there was no more storage available behind the dams. Because of that fact it is not unreasonable to approach FERC that all additional storage be made available immediately until the Corps process has ran its course due to the extreme flooding conditions on the Skagit River and the dam operational impacts on the residents of Skagit County and in the long run the impacts on the American taxpayer.



Another thing that is clear based on document review is that the BPA has funded the studies done on the dam storage for the Corps. I feel that this constitutes an obvious conflict of interest. Based on the results of those studies, contracts are then “negotiated” with the dam owners (PSE and SCL). This negotiation does not involve Skagit County. If we are to enter a new era of “trust” through open communication with the Corps it would seem to me that Skagit County has to at least have access to all those documents.

### Recommendation

Skagit County should immediately request a meeting with the Corps and determine exactly what this “Corps Process” entails. Once this is determined a **formal document request should be made** to the Corps to produce all files containing all documents concerning how this process has been conducted in the past concerning FERC (formerly FPC) determinations and orders and Corps recommendations for storage. It must be determined what exactly the Corps looked at in past decisions. How did we go from 200,000 acre feet of storage authorized behind Ross Dam to 125,000 acre feet? How did we go from the maximum recommended storage behind Upper Baker to a lesser number? How have those decisions impacted flood damages since 1975 on each of the flooding events (as in all flooding events) from 1975? If the County would like assistance from a skilled document reviewer to assist them in this endeavor I would be happy to volunteer my services. If the Corps bulks at this request then Congressional pressure should be put on the Corps to comply. Clearly there is a direct connection between the damages experienced from flooding events in Skagit County to the operation of the dams. Mother Nature is not entirely alone at causing those damages.

Further, in answer to Colonel Lewis’ question to Commissioner Anderson concerning, “How much storage do you want behind the dams?” The answer to that question should be obvious, **“Every drop available.”** Anything short of that creates a situation wherein flood damages are directly proportional to every drop that was not provided.

### Identify Priorities and Projects

One of the main complaints I have heard repeatedly from resource agencies and the Tribes is that Skagit County is continually changing the project. First it was overtopping levees. Then it was the Avon By-Pass. Then it was open the three bridge corridor. Now it is storage behind the dams and storage in the Nookachamps. In defense of Skagit County my answer has been almost the same as Chal Martin’s which is if you have several boats tied together and you are crossing a lake and the boat you are in springs a leak, you don’t go down with the ship. You get in the boat that floats. My apologies to Chal Martin if that is not exactly what he said but it was clearly words to that effect.

Overtopping levees, while I personally support the concept from an engineering, economic and even environmental standpoint are just not politically going to fly in Skagit County as I am sure Bob Hart and Harvey Waldon can attest to. Setback levees while Skagit County has been told since 1897 that is the solution, urban encroachment into the floodplain has been such that now in most cases that option is no longer doable due to the economic price tag associated with such a solution. And really, by moving back only part of the levee system, all you are accomplishing is transferring the floodwaters further downstream. While the concept of moving back the levees in the three bridge corridor is a possible solution all you are doing is transferring the flood risk further downstream to the next chokepoint, not to mention the horrendous cost associated with bridge construction.

More dams on the Sauk and dredging have went the way of the dinosaur many decades ago and while a popular concept are never going to happen. **This leaves us with only upriver storage behind the existing dams, buyout of properties at risk, and possible more storage in the Nookachamps.**



## Recommendation

As previously stated the upriver dam storage is the only alternative which provides relief to all of Skagit County and is the least environmentally obtrusive. You are not only providing reduced damages for the residents of Skagit County, you are saving the American taxpayer money in disaster relief. At the same time you are reclaiming wildlife habitat and fish spawning areas that were lost during the construction of the dams which underwent no environmental review when they were constructed.

The buy-out of at risk properties should be hastened and made a priority project by all agencies concerned. Recently at a meeting with County staff two of the major stakeholders in the Nookachamps showed their interest in pursuing this option. This should be pursued immediately. The County should then consider the option of using the acquired properties as a wetland mitigation banking system and/or reestablishing the floodplain forest that used to grow there. Again, creating wildlife habitat and fish spawning areas while at the same time creating not only more storage but more efficient storage.

Listing these and other smaller projects should be a priority of the County within their Skagit County Comprehensive Floodplain Management Plan which is what the State Department of Ecology FCAAP has reportedly given Skagit County \$827,000 dollars for over the last 5½ years to create. The completion of this document should receive a high priority status by County staff. The document must be project specific and once that is accomplished then additional funding can be sought through a variety of government programs for the individual projects. Completion of the document also shows resource agencies that the County is serious about flood control and floodplain management and has a plan to accomplish both. Once that is done we can then begin to utilize the variety of funding sources available to us (i.e. NCRS, FCAAP, FEMA, and SRFB).

## Further Recommendations

I feel very strongly that we need to evaluate the effectiveness and possibly the existence of the Skagit County Flood Control Committee. With the exception of writing a couple of letters it has not been a very productive body. It never takes initiative on its own, relies on the Public Works Department to determine when they should meet, and takes up an inordinate amount of staff time (i.e. they don't even take their own minutes requiring public employees to spend overtime to do the committees business).

Perhaps it is time to consider a "Power Flood Control Committee". It too would be advisory in its existence but would be composed of one County Commissioner or their representative, one mayor, one dike district commissioner, one Tribal member (an official of the Tribe i.e. a chief or a member of the tribal council), one representative of the environmental community, one representative of the farming community (not to be living within the Dike District commissioners dike district or the Mayors town), one member of the business community (again not from the Mayors town or the dike district) and one citizen at large who does not live in the floodplain and has no connection with a town, dike district, business or farming interest. The committee would meet once a month to review all MFR's, correspondence, notes, e-mails etc. that have been generated concerning the flood issue. They would take testimony from interest groups and stakeholders including but not limited to resource agencies, Tribes, and for that matter anyone else interested in this issue. They would prepare a monthly report to the County Commissioners concerning the activities of the committee and recommendations based on what they have learned. And above all, at least one member of the committee would be asked to sit in on any and all meetings between staff and any resource agency.

In the alternative, if another committee is unacceptable, then perhaps the re-creation of a past position known as the Skagit County Flood Control Coordinator would be more effective. The individual who used to hold that position was George Dynes. He would attend all meetings with resource agencies and county staff and report directly back to the Skagit County Commissioners. He was instrumental in





obtaining the additional flood control storage we now have behind Upper Baker Dam. He had no authority to speak for the County or to commit the County to anything, only to attend meetings and gather information and report back to the Commissioners. His pay was one dollar a year. By paying him he was an official of Skagit County that when resource agencies and dam operators and county staff saw him walk through the door they knew he was there for one purpose and one purpose only, flood control. Staff was directed to give him their full cooperation. While some of his ideas were highly controversial (he wanted to build the Avon By-Pass and use the discharge water from the nuclear power plant to flow through the by-pass and sell it to farmers as irrigation water -- we'd of had the only peas in the nation that glowed in the dark) his commitment to the issue was unquestionable and as stated was instrumental in obtaining the storage behind Upper Baker.

### Where Do We Go From Here

Without trying to sound like I'm stroking my own ego, I firmly believe that even if only some of what I have recommended to the County Commissioners is in fact implemented, we can begin to rebuild some bridges with our 70% partners and the frustration factor can be a thing of the past. Once that is accomplished, and hopefully in a very short period of time, we can then rebuild the support of our state and federal elected officials. One of the things that I didn't learn until later in life is that it is always more important to be a good listener than it is to be a good speaker. However, when you do speak, it should be from the standpoint of respect for others, knowledge, and authority. I've learned that the more I can remove my own ego from the equation, that when people want to argue, let them argue with documentation and not personalities. Once that is accomplished, we just might see flood control as a reality in our lifetimes. It's all about communication.



## APPENDIX A

### Read-Ahead for 8 May 2003 Meeting with Skagit County Officials Commissioner Ken Dahlstedt and Public Works Director Chal Martin

#### Skagit River Flood Damage Reduction Feasibility Study

Here is a brief chronology of recent actions by the County that call into question their resolve to work cooperatively with the Corps to address flood problems. We are largely being kept in the dark on things I would expect a sponsor to be open about.

- **4 February 2003 – County signed Personal Services Agreement with PIE (\$200,000)** and issued Task Order No. 1 (three-Bridge Corridor Project document preparation and conduct overall coordination for this effort). County has apparently issued additional Task Orders since PIE is performing work on Upper Baker additional flood control storage, attending meetings, and claiming to be formulating alternatives and working on the PMP. The County has never notified or involved the Corps in any aspect of this agreement, task orders, or scopes of work. We read about it on the Skagit County web site.
- **4 February 2003 – County requests Corps to immediately begin development of the documentation necessary to obtain the remaining 26,000 acre-feet of storage available for flood control at the Upper Baker Dam**, working closely with Puget Sound Energy and Skagit County. Staff coordinates with PSE and County and brings detailed scope and cost estimate to perform the technical evaluation to the 18 March Executive Committee meeting. Instead, County elects to have PIE perform a preliminary assessment. We have never seen a scope of work for this work or for evaluations currently underway.
- **7 April 2003 – Skagit County signed Task Orders under a Personal Services Agreement with EnviroIssues to update the Skagit Risk Video (\$10,004.11), and revise the communication and public involvement plan for the flood damage reduction project (\$4,180.76).** The County has never notified or involved the Corps in any aspect of this agreement, task orders, or scopes of work. We read about it on the Skagit County web site.
- **10 April 2003 – At a coordination meeting with County staff, Mike Scuderi was chastised by Dave Brookings for having met with our geomorphology contractor without County participation or approval.** Mike is working with the contractor to address and incorporate the ITR comments to that the reviewers and Skagit County can concur with the final scope before with request a fee proposal and issue a work order to the contractor. I subsequently learned that County staff had met with the contractor on 9 April to discuss their issues with the scope and has never acknowledged this meeting. Our contractor is a part of our staff under PMBP for that specific work, and we do not need sponsor approval or their presence in order to perform staff work. We do coordinate fully prior to initiating and concluding scoping and contract task order awards.



- **15 April 2003 – Dave Brookings verbally advised District staff that Skagit County does not want studies aimed at obtaining additional storage for flood control at the Baker River Project incorporated into the Corps’ feasibility study.** They intend to pursue this through the ongoing FERC relicensing process, utilizing supporting documentation prepared by PIE and possibly others. PIE’s very preliminary assessment was presented to H&H and Planning staff, with admission by PIE’s Albert Liou that he had made a number of simplifying assumptions that require verification. We advised that a more rigorous analysis should be performed prior to any decision to launch into a full-scale investigation. We believe that PIE is performing additional analysis, but no scope or methodology has been coordinated with H&H staff.
- **15 April 2003 – Dave Brookings and Harry Hosey verbally requested that we hold off on preparation of a revised PMP until the County and PIE gets back to us on their vision of a project scope and possible new alternatives to be evaluated.** Dave Brookings advised that not only did the County intend to perform Baker Dam studies on their own, but the Three-Bridge Corridor and possibly Sterling cut-off levee upstream of Burlington as well. We have heard nothing further on this matter.
- **21 April 2003 – Skagit County amended a Personal Services Agreement with Tetra Tech/KCM Inc. (\$30,000) for preliminary hydraulic engineering for the Three Bridge Corridor.** The County has never notified or involved the Corps in any aspect of this agreement, task order amendment, or scope of work. We read about it on the Skagit County web site.



## **APPENDIX B**

### **MEMORANDUM**

**TO:** CHAL MARTIN; COMMISSIONER KEN DAHLSTEDT  
**FROM:** LARRY KUNZLER  
**SUBJ:** REVIEW OF ROBERT D. JARRETT REVIEW OF PIE DRAFT STUDY  
**DATE:** SUNDAY, FEBRUARY 27, 2005  
**CC:** DAVE BROOKINGS, DAN BERENTSON, MIKE STANSBURY, TOREY NELSON, LORNA ELLESTAD

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### **INTRODUCTION**

Thank you very much for the opportunity to review the above referenced document. First, I find myself at a great disadvantage in reviewing his letter as Lorna never sent me a copy of the PIE document “Draft Evaluation of Flood Peaks Estimated by USGS” dated November 16, 2004. Without that document as well as all the documents referenced by Dr. Jarrett I am at a loss to give a complete review. I would like very much to review everything referenced by Dr. Jarrett and the County should as well. However, having said that, I think there is enough contained in his “Review and Comments” to show that his observations are anything but an *independent review* especially coming from a paleoflood-hydrologist who clearly has not visited the area and has no real knowledge of the area in question.

Further, (and the comments I am about to make are constructive in nature and not meant to demean the actions taken to date by the Public Works Department, or a criticism of the work that PIE has done since I haven’t reviewed that data), I think we are making a mistake by trying to play this game in USGS’s ballpark. Challenging the conclusions of the Stewart 1923 Report is not a question of was the “in-exact science of hydrology”<sup>1</sup> properly applied by Mr. Stewart but rather it is a question of does the evidence support Mr. Stewarts conclusions. This is a question of evidence, reliability, and creditability and does the Stewart Report raise enough questions that we should abandon his findings and use the much more reliable 80 years of gage data at The Dalles, a gage that was installed at the suggestion of Mr. Stewart himself to further clarify his work product.<sup>2</sup> It should be up to USGS to prove Mr. Stewart’s conclusions by producing his work product (something they cannot do), not the citizens of Skagit County.

### **JARRETT COVER LETTER**

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<sup>1</sup> Cindi Barton letter dated 6/7/2004.

<sup>2</sup> Stewart 1923 Report, #4 page 22-24 and Knapp Testimony, page 2, 11/25/24.



Mr. Jarrett states that he “*followed the USGS standard report review process as much as possible*”. It is imperative that we obtain a copy of that “*review process*” and determine what it was that he did that was not in conformance with that process. It is nothing short of alarming that he relied upon Mark Mastin and John Costa (both of whom were in attendance at the Skagit County Flood Control meeting on May 3, 2004) “*for relevant data*” in USGS files and “*two technical reviews*” of his review. We should immediately request copies of everything Mr. Jarrett reviewed. This hardly constitutes an independent review when the reviewer is relying upon the very people who support the Stewart Report (he even “*incorporated*” the Mastin and Costa comments).

## **REVIEW AND COMMENTS**

**Page 1:** *Historical floods (1815 and 1856) are termed “unrecorded”. Every effort needs to be made to learn more about these floods and incorporate them in the flood-frequency analysis.*

**COMMENT:** You’ve got to be kidding. These floods have been dismissed by not only USGS but by the Corps of Engineers.

*The flood frequency for different locations along the Skagit River is computed by the U.S. Army Corps of Engineers with data from the USGS. Their most recent frequency curves do not use the USGS peaks for 1815 and 1856, so much of your concern about those peaks seems moot. . . . Based on uncertainty in the timing of the 1815 and 1856 flood events and the fact that neither settlers nor USGS employees were present to document these events shortly after their occurrence, all discharges for the 1815 and 1856 events in WSP 1527 are now rated poor and indicated as estimates in the USGS Peak Flow File. (Source: Cynthia Barton letter dated 6/7/2004)*

*Flood records are available in the basin since 1908 but they are not continuous at any single site for the entire period. As described previously, estimates have been made of crest discharges for historical floods occurring in 1815, 1856, 1897, and 1906. However, it was felt that the use of these flood peaks not in a continuous series and of questionable accuracy would decrease the over-all accuracy of the frequency curve, and so they were omitted from the study. (Appendix to Report on Survey for Flood Control of Skagit River and Tributaries, Corps of Engineers, 2/21/52, Not For Public Release, Page 17 ¶33)*

**Page 2:** . . . *Flow hydraulics in the bedrock canyon reach is extremely complex and may justify use of a multi-dimensional (multi-D) flow model.*

**COMMENT:** USGS has continually stated that the floor of The Dalles is composed of bedrock. However, no one, not even Mr. Stewart knows the exact depth to the bedrock:



2. A large portion of the solid rock bed in the Dalles is overlain with sand of unknown depth. This sand undoubtedly scours out during floods. The cross-sectional area of the flood channel is, therefore, from solid rock to flood surface. The computation of cross sectional area for the 1921 flood had been made from sand surface to flood surface. It is not believed that the sand averages more than a few tenths deep, for the solid rock projects above the surface in several places.

(Source: 1923 Stewart Report @ page 83)

If there is anything that deserves further study in Skagit County I would have to say that it would be a determination of just how deep is the channel of The Dalles is to bedrock and does it scour out all the way to bottom during flood events. This shouldn't take anything more than someone in a boat with a piece of rebar to determine assuming of course that when the rebar stops it is not hitting a gravel bar under the sand. In an early Spring 2004 conversation with Wiggins he related to me that his confidence in the Stewart findings at The Dalles was based on the "fact" that they were dealing with a "solid bedrock channel" very shallow in nature. The significance of this I will leave to the hydrologist but it is just one more "fact" that has not been proven. Also, we should not forget that only the 1921 flood was determined at The Dalles by Stewart. The 1897, 1909 and 1917 floods were "one mile upstream".<sup>3</sup>

**Page 2:** *Excluding historical peaks in a flood-frequency analysis is not standard or acceptable practice in flood hydrology.*

COMMENT: One has to interpret this statement as he is assuming that everything Stewart said or did is correct.

**Page 2:** *In addition, a flood-frequency analysis can be made by using ranges of flood estimates from 1815 and 1856, because these exceptional floods were documented as the largest known since the early 1800's.*

COMMENT: See comment to page 1.

**Page 6 Section 3.2:** *I believe Mark Mastin's responses to specific questions concerning high-water marks and gage heights of historical floods raised by Mr. Chal Martin's letter of December 13, 2004 are appropriate for section 3.2.*

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<sup>3</sup> Source: Stewart Report, 1923



**COMMENT:** I have not seen Mastin's e-mail dated 2/10/2005 and therefore could not comment on this section.

**Pages 7, 8, 9 Sections 3.1 to 3.2.3, paragraph 1:** *I believe that much of the uncertainty in the historical flood estimates that can be evaluated now resides in factors that likely may remain unknown (unless someone can find newspaper records, diaries, or other historical documents) and need to be evaluated. . . . Stewart did substantial flood documentation in the Skagit River basin, particularly at the Concrete gage and lacking evidence to the contrary, it seems prudent to believe his statements that the HWM's documented were for the Skagit River. He also involved many local ranchers and lay people in his work to document flooding. They would have been alert to the fact that Stewart's conclusions about the occurrence or origins of floods were reasonable.*

Historical newspaper records and historical records? Now those we got. It is my understanding that the documents I am about to cite from were sent to Mr. Jarrett. If that understanding is correct then clearly he ignored them.

Mr. Stewart himself utilized local newspaper articles in writing his report. (See attached "Appendix A") We actually now have many of those articles in our archives (1896, 1897, 1906, 1917 and 1921). However, the flaw in Mr. Stewarts research is that he only utilized the Mt. Vernon Herald and one article in the Hamilton Record and two articles in the Mt. Vernon Argus as the basis for his newspaper research. Had he done a more thorough job he would have found the article in the Courier Times which stated the following::

Measurements at the Dalles, near Concrete, show that the flood water this year reached a point two feet higher than at any previous time in the memory of the oldest settler. Charley Moses says that it was the biggest flood, with the biggest volume of water ever carried in the Skagit.

At Van Horn the water was 14½ inches higher than it had ever been. In 1909 the river in the upper valley was only about two-thirds as wide as it is now. Hundreds of acres of land are being washed away every year, by both Skagit and Sauk rivers. W. A. Ellison says he has been on the upper river for 21 years and this is the biggest flood he has seen or heard old timers tell about.

(Source: [Courier Times, 12/22/21](#))



Had he made any attempt at comparing what the historical newspaper articles said about the 1909 flood and the 1921 flood impacts in Burlington he might have reached a different conclusion on the size of the 1909 flood being larger than the 1921 flood. In 1909 the Burlington Journal stated the following:

along the Skagit. Burlington had about one foot of water in some of the streets, and there were many buildings over the town that were not even surrounded by water. Neither the

Thursday was a great day in Burlington and many talked of camping on the heights Tuesday night, but the change came about noon, the water went down rapidly and Burlington has perhaps received less damage than any other town on the Skagit.

*(Source: Burlington Journal, 12/3/09)*

Some of the streets had water in them. Many buildings not even surrounded by water. Burlington received less damage than any other town on the Skagit. Had Stewart taken the time to compare the 1909 flood to the 1921 flood he would have found the following:

### **1921 December Flood**

Monday night, December 12, the dikes east and southeast of Burlington broke. Tuesday morning at six o'clock the flood water covered Fairhaven Avenue, and in part the residence districts of the city. At this time the entire lowlands lying east, west, south and in part northwest of Burlington were inundated. The depth of water is on relative, the lamentable fact being that the area of low lands covered with water was wide-spread. That certain spots

*(Source: Burlington Journal, 12/16/21)*





Clearly, Burlington had more flood water in 1921 than they did in 1909 which strongly supports the previous Courier Times article that the 1921 flood was larger. I respectfully submit that this strongly suggest that Mr. Stewart confused the 1909 flood event marks with the 1921 flood marks, assuming of course that he found marks at all. Given the problems that Mark Mastin had finding the flood marks of the October 2003 flood event just 7 months after the flood, using the “best available science” available to him in 2004, it would not be unreasonable to assume that Mr. Stewart had much the same problems 11 months after the 1921 flood event given the “best available science” available to him in 1922 let alone finding the flood marks of the 1917, 1909, 1906, and 1897 floods.

When you combine the above newspaper research with the historical documented statements made by E. L. Knapp, County Engineer and Colonel Barden at the public hearing on November 26, 1924 it becomes somewhat of an enigma why anyone would put any credence at all in anything Stewart had to say:

gathering additional hydrographic data. Because of the limited funds available in time past, such technical data as has been gathered in this vicinity, has been very meager and calculations of stream flow are at best only an estimate and accurate to within only 10 to 20%. The technical data so far gathered, has been done entirely by the U. S. G. S. Department of Water Resources, and they have had to rely upon intermittent gage readings, observations and recollections of residents, and more or less disconnected precipitation records.

*(Source: E.L. Knapp Testimony, 11/26/24)*

I would like to emphasize the point that Mr. Knapp brought out in his paper, that **before any really scientific plan can be prepared for the protection of this valley from floods, it is necessary to have more authoritative information than we now have as to the amount of water carried by the river in time of floods. . . .** The information that was collected by Mr. Stewart and given in his report to the committee was excellent so far as the data that he had to work upon permitted, **but that data was necessarily more or less inaccurate.** *(Source: Colonel Barden Testimony, 11/26/24) (Emphasis added.)*

They didn't believe Mr. Stewart in 1924, why should we believe him in 2005? Why shouldn't we honor Mr. Stewart and re-name The Dalles gage The Stewart Gage since it was his suggestion that we install it to begin with, and utilize the 80 years worth of gage data that he is directly responsible for gathering? This should be the main focus of the County's argument: USGS should prove the Stewart Report or use the 80 years worth of stream gage data.

**Page 9 Section 3.2.3:** *I would suggest a basin-wide paleoflood study be conducted that would include paleoflood estimates for more locations along the Skagit River and all significant tributaries.*

**COMMENT:** Wow, imagine that, a government agency suggesting another study. I guess when you can't prove the study you have been using since 1923 you should study it again. This is clearly an attempt to either stop the County from challenging the Stewart Report any further or to



generate more income for the government agency. If another study is warranted then it should be the agency to initiate and fund the study, not the taxpayers of Skagit County.

**Page 16 1<sup>st</sup> Paragraph:** *Given the uncertainty in the 1921 flood estimates due to many factors, varying these coefficients is little more than a meaningless exercise to tweak the 1921 flood discharge estimate.*

COMMENT: An admission that there are uncertainties in the 1921 flood estimate should be used to justify abandoning the Stewart Report and using the 80 years of gage data. Remember, we are not trying to determine the probable maximum flood, we are trying to get a handle on the volume of a 100 year event. Since he never mentions this it seems that the major purpose of this exercise has been lost on USGS.

**Page 18:** . . .*although I have not seen the site.*

COMMENT: Thank you very much for your thorough review. If this is not the greatest piece of evidence of the incomplete work product of USGS I don't know what is. Doesn't anyone in the Tacoma office own a digital camera?

**Pages 19 and 20:** *At this point, knowing the exact location of Stewart's gage heights may be beyond current documentation to clearly identify the actual historical stages.*

COMMENT: I'm beginning to think he did not read the Stewart Report based on his comment and the following:

**Contracted opening.**

1. Three cross sections of the channel were taken.
  - No. 1 560 feet above mouth <sup>of</sup> And about 100 feet below upper end of the Dalles. About 50 feet upstream from lower end of flood whirl pools at the entrance to the Dalles.
  - No. 2 180 feet above mouth of the Dalles (narrowest section in the gorge).
  - No. 3 At mouth of the Dalles (shallowest section in the gorge).



2. Crest of 1921 flood determined on both sides at cross sections Nos. 1 and 3, and on right side at cross section No. 2. Determinations correct within 0.1 foot on right side at cross sections Nos. 1 and 3, and both sides at No. 3. Probably within 0.2 foot at cross section No. 2 and 0.3 foot on left side at No. 1. Crest of 1921 flood also determined about 50 feet below cross section No. 1. This last determination is at lower end of right (north) whirl pool and at point of highest elevation of water surface in the Dalles. In addition the crest of the 1921 flood was obtained at several points on right (north) shore between sections Nos. 2 and 3.

(Source: [Stewart Report, 1923, pages 81 and 82](#))

**Summary:** *Stewart's study of historical floods in the Skagit River basin had, by today's standards short-comings, simplifications, incomplete documentation, no known photographic documentation, and took decades to review and complete the evaluation of flood hydrology for the Skagit River near Concrete.*

**COMMENT:** I don't know quite what to write here. This statement is very close to what E. L. Knapp and Colonel Barden stated in 1924 but apparently is a great commentary on the quality of the work product USGS deems acceptable. Previously Jarrett admitted that "...under the best of circumstances the original 1921 flood computation has an uncertainty of at least +/- 20 percent, which is larger than uncertainties of any subsequent computations of the 1921 flood". Twenty percent is almost 50,000 cfs. I would hope that the County uses this statement to justify making the argument that 20 percent is unacceptable and using the past 80 years of gage data is far more accurate and that is what we are going to use. If USGS can't get it any closer than that then they should trade in their PHD Paleoflood hydrologist degrees and go teach a math course at some University.

### **RECOMMENDATIONS**

1. Obtain everything Jarrett reviewed in order to write his report. If they refuse, file a FOIA and obtain it that way.
2. Obtain a copy of Stewart's field notebook from NARA as I recommended over a year ago.
3. Spend the \$1,500 to have Albert reset the levees to their original location and height (back then the Burlington levees were 4,000 feet back from their current location and were only 5 to 10 feet tall and used to break when the river reached a river level of 32-33 feet at the current Mt.



Vernon gage), run the 1990/1995 flood and break the levees at 32 feet and see how deep the water gets in Burlington. This will determine once and for all if the 1921 flood was greater than those two events.

4. Have Albert tweak his study and ask for a truly independent review. What we have received is nothing more than a self-serving observation (take a look at the references Jarrett cited – he wrote most of them) written only to justify more work for Federal employees. However, having said that, there is much in his report that we can use to justify not using Stewart's Report.

5. Start making the argument that the Stewart Report contains “*short-comings, simplifications, incomplete documentation, no known photographic documentation, and took decades to review and complete the evaluation of flood hydrology for the Skagit River near Concrete*” and for those reasons cannot be substantiated and therefore it is inappropriate to utilize and therefore strictly from a scientific and practical matter the 80 years of gage data is more appropriate to use in computing the 100 year flood flows on the Skagit River. Also, recommend changing the name of The Dalles gage to The Stewart gage.

Eighty years of “estimates” is long enough. It’s costing us millions of dollars in unnecessary studies and in the end, the flood control project itself.



## APPENDIX A TO 2/27/05 MEMORANDUM

Larry Kunzler transcribed the following handwritten notes on January 23, 2004 from Mr. James E. Stewart's field journal he used while working in Skagit County in 1922. The field journal consisted mostly of Mr. Stewart's flood elevation measurements taken with a handheld level in the winter of 1922. Mr. Stewart used the notes contained in the journal in preparation of his report delivered to the Skagit County Commissioners in October 1923. The notes transcribed are verbatim the way Mr. Stewart wrote them.

# JAMES E. STEWART FIELD JOURNAL

## Beginning date November 24, 1922

Page 23 Leonard Everett says 1897 flood about 9 inches lower than 1909. Says that log jam in the Dalles raised water 10 feet in 2 hours. Considerable distance and slope between 1897 and 1909 and 1921 marks. 1897 1.4 feet higher.

Page 24 At Presentine Ferry December 23, 1922. Presentine says Finney Creek had enormous flood in 1897 and changed its course.

Page 62 Measuring the lengths of rope in Dalles. Found first 100 feet only 95 feet due to shrinkage in rope. Rope probably about okay for the two Dalles sections, as it was graduated while dry but not stretched, while it was used wet and stretched.

Page 69 Checks on rope graduation were made while rope was still stretched across river. It is not certain that these checks are applicable to the lower cross sections also but probably will have to be assumed so.

Page 96 **1896 Flood** – Mt. Vernon Herald. Chinook wind started Thursday, November 12, and continued through Friday November 13. Water highest at Mt. Vernon Sunday night November 15. Highest water in the memory of the white man. Many cattle and horses drowned. P.G. Gibbons lost over a million feet of logs. W.A. Sparks lost 100 cord's of bolts. Two big breaks in levees on the west side. One near F.C. Wards place. The other at D. Storrs place. The whole Westside including West Mt. Vernon is a lake. 600 feet of the GNRR track between Burlington and the bridge washed out. One mile of track between Conway and Stanwood turned upside down. Mt. Vernon is not flooded. Dikes raised and kept above flood water.

Page 97 **1897 Flood** – Mt. Vernon Herald. Wednesday morning, November 17 a very warm Chinook wind started, almost a gale by evening. Still in banks Thursday. Early Friday morning alarm was whistled but water was over levees already. Mt. Vernon flooded. Paper states not as much damage as 1896 flood.

**1906 Floods** – Mt. Vernon Herald. Flood reached 21½ feet, October 20<sup>th</sup> p.m. at Mt. Vernon gage. November 15<sup>th</sup> and 16<sup>th</sup> big flood. Paper states it was at least 8 inches higher than 1897 (probably due to dikes). GNRR bridge greatly damaged one span at highway bridge carried away. H. Peterson killed running against draw bar.



**1909 Floods** – Mt. Vernon Herald. Wednesday November 25<sup>th</sup> Chinook started. Baker River higher than ever known. Railway bridge at Concrete carried away. Paper speaks as though crest were reached about November 25<sup>th</sup>. Friday, 10 p.m. prior to December 2<sup>nd</sup> another Chinook started and blew with increasing vigor until Monday – 66 hours. Water still rising at Sedro Tuesday p.m.

Page 98 Hamilton Record says 1909 flood 4 inches higher than 1897 at Hamilton. More damage in 1897 however.

**1917 Flood.** Slightly over 21 feet, Mt. Vernon gage December 19.

**1921 Flood.** Stated that 1909 flood 26.4 Mt. Vernon gage and that 1921 flood 1.5 inches lower. Estimate that Puget Sound and Baker River companies lost \$50,000, 20 sections of logs.

Page 100 Ed Presentine says 1897 flood 6 inches higher than 1909 at Rockport. Says Indians claim 1897 flood highest on Sauk of all times.

Page 101 Rockport. Bark and moss point. Possibility 1897 likely wind blown sand. 1.1 feet below this 1921 mark? 1.23 feet below this is 1897 mark. NOTE: Assume 1921 same as 1909. Probably 1909 nail. Ed Presentine says 1897 .5 feet higher than 1909.

January 28, 1923. Old Johnny Towne (Indian) said during 1909 flood that when he was a boy he saw river even higher. He is considered to be 70 years old or more so flood would be that of 1856.

Page 106 At Sedro Woolley. 1921 High-water 54.38. 1917 High-water 54.2.

Page 107 Ed Woods brother says 1909 flood highest about 2 a.m. Had fallen some by morning. This does not check with statement by Hart and others.

Page 116-117 December 13, 1922 at Avon. 1921 high-water mark on underside of root<sup>4</sup>. Same mark shows the crest of the waves while the sand in the moss 100.00 shows crest of standing water. As all of other marks practically are sand in moss we will use that  $100.00 - 85.60 = 14.40$  for 1921 flood.

Page 122 December 12<sup>th</sup> & 13<sup>th</sup>, 1922. Assessor says 1897 flood about 1.1 feet higher than 1896.

Mt. Vernon Argus says water began to recede at 8 a.m., Tuesday, November 30, 1909. Attributed this to breaks in dikes above. Unverified report that water was 2 or 3 feet deep in Olympic Marsh.

**1906 flood** reached crest at 4 a.m. November 16<sup>th</sup> 25 feet above low water mark and 1 foot below dikes.

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<sup>4</sup> It could not be determined if this word was root or roof. If he indeed was at Avon as the field notebook suggest I've got to think that the word was roof as the water in Avon would have been very deep although I admittedly don't understand his computations.



**1921 flood** 24 feet 10 inches. 2 inches below 1909 at Mt. Vernon late Monday night.

Page 123 Old timers stated that 1897 only time waters reached downtown streets at Mt. Vernon.

Page 127 December 16, 1922 at Sedro Woolley. Hart says 1896 flood at GN embankment across Gages Slough<sup>5</sup> and water at Sedro Woolley dropped nearly 2 feet suddenly during middle of afternoon although it had been rising 8 inches per hour. Was up again by 1 p.m. and finally raised higher then before. 1896 nearly same height as 1917 and not over 2 inches below 1897. 1909 flood 16 inches approximately above 1917 mark in stump. 1921 .075 feet below 1917.

Page 129 Highest upstream dike on Skagit is just above Burlington except the one at Gages Slough. Should see Hart and get more data on big spring flood.

Hart says a temperature of 50° at Sedro Woolley makes a good raise. A temperature of 54° for 48 hours makes a big flood.

Page 131 At Skiyou Ferry, Andersons and Ringhouse barn. 1917 and 1921 high-water practically the same.

At the 3<sup>rd</sup> and 2<sup>nd</sup> to last pages from the end of Mr. Stewarts journal there were sort of a list of "things to do". Included in the list were the following:

- Get dredge data
- Study Baker Lake Storage
- Get soundings from USGS
- Determine cost of dikes to protect old channel.
- Get flows of tributaries at time of floods.
- Determine cost of moving people.
- Find out the earliest settlement in Valley.

The last item on the list was the notation "Channel Sterling Bend to Padilla Bay." Mr. Stewart's journal was located in a red well file folder with a cover letter from Mr. Stewarts wife stating, "Here are all my husbands papers on the Skagit Report." Contained in the folder was a carbon copy of the 1922 Robert E. Herzog GNRR report recommending the "Diversion Channel" to Padilla Bay.

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<sup>5</sup> Unsure whether he is talking about RR crossing in Burlington or along Highway 20. Given the fact that the "Sterling Dam" was placed along the old dollar road (Highway 20) in 1899 and was higher then the Burlington levees and this was adjacent to Hart's property, I think the Highway 20 location is more accurate. This would explain why he observed the 2 foot drop.



## APPENDIX C

PRINTER-FRIENDLY FORMAT **Melinda and Melinda** **The New York Times**  
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April 13, 2005

### EDITORIAL

The Untouchable Corps

**A**n anyone who cares about responsible budgeting and the health of America's rivers and wetlands should pay attention to a bill now before the Senate Committee on Environment and Public Works. The bill would shovel \$17 billion at the Army Corps of Engineers for flood control and other water-related projects - this at a time when President Bush is asking for major cuts in Medicaid and other important domestic programs. Among these projects is a \$2.7 billion boondoggle on the Mississippi River that has twice flunked inspection by the National Academy of Sciences.

The bill would also weaken civilian control over the corps, a fiercely independent agency that operates in what amounts to a parallel universe in Washington, spending billions on public works projects ordered by members of Congress. The Government Accountability Office and other watchdogs accuse the corps of routinely inflating the economic benefits of its projects. And environmentalists blame it for turning free-flowing rivers into lifeless canals and destroying millions of acres of wetlands - usually in the name of flood control and navigation but mostly to satisfy Congress's appetite for pork.

Pointed in the right direction, the corps can accomplish engineering marvels without corollary damage - the dredging of New York Harbor is a case in point. But too often senators like Christopher Bond, Republican of Missouri, and Trent Lott, Republican of Mississippi, point it in exactly the wrong direction. The most notorious example is the Mississippi River project, a lock-building plan. It has failed two reviews by the National Academy of Sciences on economic and environmental grounds.

Over the years, enlightened senators like John McCain and Russell Feingold have pushed for major reforms, including independent peer review to make sure that corps projects are fiscally and environmentally responsible. Yet the water resources bill drawn up by Mr. Bond and his like-minded colleagues would not only prohibit meaningful outside review but would also undercut the authority of any civilian official - up to and including the secretary of the Army - to countermand corps decisions.

This is a bad piece of legislation. Key Democrats on the committee - including Hillary Clinton of New York, Frank Lautenberg of New Jersey and Joseph Lieberman of Connecticut - should make sure it does not emerge from the committee without significant changes.



