

Governor's Upper Yellowstone River Task Force
Meeting Transcription
July 29th, 2003
Yellowstone Inn
Meeting began at 7:00 p.m.

I. Introductions

Members Present:

John Bailey, Chair	Jerry O'Hair	Bob Wiltshire
Roy Aserlind	Brant Oswald	Jim Woodhull
Michelle Goodwine	Ed Schilling	
Dave Haug, Vice Chair	Rod Siring	

Ron Archuleta, USFS Ex-Officio	Allan Steinle, Corps Ex-Officio
Tom Olliff, YNP Ex-Officio	Joel Tohtz, FWP Ex-Officio
Laurence Siroky, DNRC Ex-Officio	

Others Present:

Liz Galli-Noble, Coordinator	Scott Bosse	Bill Moser
Kelly Wade, Secretary	Lionel Dicharry	Jim Robinson
Jacqueline Isaly, Assistant	Steve Golnar	Daryl Smith
Duncan Patten, TAC Chair	Steve Holnbeck	Stan Todd
Jim Barrett	George Jordan	Jason Lehmann
Karl Biastoch	Peter MacKenzie	

II. Prior Meeting Minutes

Jerry O'Hair moved to approve the July 22, 2003 minutes. Ed Schilling seconded the motion. The motion passed unanimously.

III. Financial Updates

EXPENDED GRANTS			
Grant Name	Completed	Amount	Study Component
DNRC Watershed Planning Assistance Grant	6/30/99	2,100.00	Physical Features Inventory
DNRC HB223 Grant	7/30/99	10,000.00	Aerial photography
DNRC Riparian/Wetlands Educational Grant	6/30/00	960.99	<i>Hydrologic Response to the 1988 Fires Workshop</i>
DEQ 319 Grant (1 st)	9/30/00	40,000.00	Coordinator position
DNRC Watershed Planning Assistance Grant	1/31/01	10,000.00	Watershed Land Use Study
DEQ Start-Up Grant	6/26/01	49,138.00	Coordinator position, Admin secretary, additional cross-sections, operating exper
DNRC HB223	10/1/01	6,500.00	Riparian Trend Analysis
BLM Funding	10/26/01	10,000.00	Wildlife Study
DEQ 319 Grant (2 nd)	3/21/02	58,000.00	Coordinator position
DEQ 319 Grant (3 rd)	9/30/02	44,000.00	Coordinator position
EPA RGI Grant	12/20/02	30,000.00	Geomorphology study
CURRENT GRANTS			
Grant Name	Amount	Spent	Remaining Balance
DNRC RDGP Grant (expires 7/03)	299,940.00	288,621.63	11,318.37
DEQ 319 Grant (4 th) (expires 3/04)	122,200.00	69,816.27	52,383.73

IV. Other Task Force Business

There was no other Task Force business that needed to be discussed at this meeting.

V. Task Force Recommendation Deliberations

John Bailey: I see only familiar faces, so I will dispense with going through our *Steps for Formal Action on Task Force Recommendations* tonight. I'm tired of reading them every week in the minutes. We will now move into recommendation deliberations. Tonight we are sort of doing two phases; we're trying to move through some of the less complex topics in the first hour, and from then on, we'll go back into the more complex ones. If we finish those, we're going to work on the topics that we have yet to address at all. Those topics are under "Others" in our Topics of Considerations, and I believe that Liz gave them new headings because they did not fit under any of our established topics. Number one on our list is Water Quality. Are there any comments or recommendations on Water Quality?

Brant Oswald: John, I'd like to ask a question. As I was reading through this, one of the things I think after my involvement with Trout Unlimited years ago, is that we think we have a pretty healthy system now, but we need to know if that changes. One of my questions, and I don't know if we have the right person here to answer this question but, what sort of water quality testing goes on now? Is there someone here that can answer that?

John Bailey: Does Steve know? Steve, is there any water quality testing going on on the river now?

Steve Holnbeck: I don't think that any of the more detailed chemical analyses is being done like things that are done in the lower Yellowstone.

Duncan Patten: We do have NAWQA testing, which is the USGS National Water-Quality Assessment Program. They have one site here on the Yellowstone at Corwin Springs, but obviously USGS is cutting back on that because they got cut way back on their funding.

John Bailey: Are they doing heavy metals?

Duncan Patten: I think there is some heavy metals, plus there is some of the research that has been done on arsenic and some of the other evidence.

John Bailey: Brant, did you want to make a recommendation on that?

Brant Oswald: No, not necessarily.

Tom Olliff: Inside Yellowstone we have 14 more or less permanent water-quality monitoring stations. I think certainly Soda Butte, Lamar, Yellowstone River, Yellowstone Lake are in this drainage, and we're doing things like D.O. (dissolved oxygen), and that kind of stuff, but heavy metals at Soda Butte.

Liz Galli-Noble: I'm sorry the DEQ isn't here tonight. The TMDL that they're doing for the upper Yellowstone showed that the mainstem was potentially impaired, and so were, I believe, five tributaries. They have done some limited water quality sampling, and they are planning to do more in the next year for the 2005 TMDL deadline.

Jerry O'Hair: I know in the Paradise Valley they are doing some underground water sampling. I've been working with the Butte School of Mines.

John Bailey: Was that the thing that Ellen Woodbury talked about early in this process?

Liz Galli-Noble: Yes, that's in conjunction with a 319 grant that the County is sponsoring. Do you know more about that, Ed?

Ed Schilling: I don't know about quality of water. I know they are looking at quantity of water more than anything, because there are more subdivisions, water users; they were mainly, as far as I know, looking at more quantity, rather than quality.

John Bailey: Brant, going on what you were saying, what indicators there are, don't we have a bigger issue on indicators? We sort of have this sense that the river is doing fairly well, but how do we determine that in the future? We never really sent this back to the TAC, but what kind of indicators do we advise people to watch on the 10-, 15-, or 25-year realm? Seems like that would be a great recommendation, but we need to know what indicators to use.

Duncan Patten: Yes. There is a researcher or a post-doc researcher at Montana State who has gone back and looked at quite a few sites on the Yellowstone, and has long-term data on macroinvertebrates, which is really as good an indicator of water quality as any. It's what EPA uses as their primary biological indicator in rivers. You could end up with a shift in macroinvertebrates where your biomass of macroinvertebrates can remain as high, but the mix of species shifts to one of an impaired river. Actually, the West Fork of the Gallatin, near Big Sky, now has reached that point—that it is an impaired river, although they like to think that it isn't, but it is—and that's just based on the assemblage of macroinvertebrates he sampled. He does have data on the Yellowstone, on macroinvertebrates, and if you are going to make a recommendation, it would be something like maintaining a long-term database on macroinvertebrates, and encouraging that being done by either a state or a federal agency, that type of thing. At the least, that's the kind of monitoring that should be done.

John Bailey: Do you want to make that, Brant?

Brant Oswald: Why don't I work on some wording here?

John Bailey: Duncan, what about the bird study? We have all these other studies, and the bird study was one that showed some longevity. The cottonwood study. Do we want recommend that some of these other studies, at some point someone should observe?

Duncan Patten: Well, obviously we haven't done water quality. It would have been nice to have done that. We've done bird studies, bench studies, but that's in a sense outside of the river. We have fish studies, but we didn't do parasites in fish or things of that kind. If you're thinking of why the river has remained in a healthy state, obviously the quality of the water is part of that healthy state. Even though we didn't do it, if it is something that 10 years from now, 20 years from now, you want somebody to be able to look at this river and say that it really hasn't changed in terms of water quality, something like macroinvertebrates is a good indicator. It's not good for heavy metals, because the problem is in places where there are mines, macroinvertebrates can adjust to a heavy metal contamination, and all of a sudden you think you've got a clean stream, and it really isn't, because they've evolved and adapted to it. But in general, macroinvertebrates are a good indicator. Again, what is a healthy stream? A healthy stream is everything from what's in the water to what's in the flood plain, and you're looking at the whole picture. Water quality is something that we didn't look at, but it certainly is critical in terms of looking at it.

John Bailey: Right, and one of the comments somebody made, is that the river looks like it is okay right now. But after 1996 and 1997, there were a lot of projects put in; will that, when we get down the road 10, 15, 25 years—probably determined by the kind of runoffs we have—could we then find that we need to go back and look at something to see if they had a detrimental or no effect?

Duncan Patten: Well, runoff is a good one. If you take the Big Sky situation, that is basically contamination of the river from both runoff from development, as well as groundwater seepage with high nitrates and things like that. If you get more development right near the river, you get that type of thing. They worry about dumping a little bit of effluent in the river. The groundwater seepage, if you use the Gallatin (from up above Big Sky), the data shows a rapid increase in nitrates, and that is certainly picked up in macroinvertebrates as well. That's the direction I would go.

Brant Oswald: I'll take a stab at something:

#1. Proposed recommendation by Brant Oswald:

"Encourage the maintenance of a long-term database of macroinvertebrate populations to monitor water quality in the Yellowstone River."

And I'm open to any changes in wording.

Jerry O'Hair: What does macroinvertebrates mean?

Duncan Patten: What is macroinvertebrates? Living on the rocks and in the bottom of the stream are often early stages of a lot of the insects that come out, and those insects are invertebrates. Macro meaning large, versus other types of insects, or other invertebrates that could be very, very small. So, in a sense, it is early life stages of a lot of the organisms, the insects that emerge in the river. Some are permanently aquatic, but some of them are early stage, and I'm sure there's probably a biologist around here who can answer that better.

Joel Tohtz: Invertebrates don't have a backbone, and macro means you can see it without a microscope. So, it would include insect larvae but also wormlike things, worms, leeches, on and on.

John Bailey: Any comments? Are we ready to go to Step 2, is that what I hear? Okay, we'll go to Step 2. The chair will reread the proposed recommendation, "Encourage the maintenance of a long-term database of macroinvertebrate populations to monitor water quality in the Yellowstone River." Task Force, any final concerns or questions? Are we comfortable with this? This recommendation reaches consensus.

Recommendation Passed by Consensus:

"Encourage the maintenance of a long-term database of macroinvertebrate populations to monitor water quality in the Yellowstone River."

John Bailey: Anything further on water quality? Hearing none, we'll move to Yellowstone National Park Management and Watershed Management. Tom, one of the things that has come up all through the Task Force process is the fact that so much of the drainage is in Yellowstone Park, and we never had any authority; so it's always been an unknown factor.

Jerry O'Hair: Well, I'm not sure this is a recommendation that falls under this particular heading, but I would like to recommend that the Task Force support the Healthy Forest Initiative that is being bounced around.

#2. Proposed recommendation by Jerry O'Hair:

"The Task Force support the Healthy Forest Initiative."

Bob Wiltshire: I guess one immediate problem I have with that is that we have no way of knowing what that Initiative is going to be by the time they're done with it in Washington. So, I would be reluctant to just say that we are going to support the Initiative, as opposed to established criteria, something that we actually want to advocate for. I've seen them take things, start out one place and end up someplace totally different.

Jerry O'Hair: One of the reasons I put this up is that the National Forest and the National Park System has come up with a media blitz to more or less glorify and praise the fires of 1988. I've been looking at the papers and it's a rather different wrinkle on it than what I saw back in 1988; when the "let it burn" policy seemed to be the thing that was in popularity. In spite of what some of our researchers have come up with, saying that the fires of 1988 didn't have any effect on the Yellowstone River, I'm not buying it.

John Bailey: Are there parts of this Initiative that we might want to single out, that we would consider? I haven't read the Initiative, only the headlines that I see in newspapers, so I'm not even sure I'm comfortable speaking on it. But I'm just wondering if there are parts of it that make sense for this watershed, that we'd want to support, rather than a blanket political thing that changes with the winds.

Jerry O'Hair: Well, I'm not an authority on it either, but I do buy the philosophy to preserve and protect and prevent catastrophic fires like we were seeing in 1988, like we saw last year, and are now seeing them in good parts of Montana, and Washington, and Idaho right now. We have seen them in Arizona and other states, and I think that to just sit by and say, "We don't know what this is going to do, or what it is going to save," is a do-nothing effort.

John Bailey: Bob, is his last comment about preserve and protect more in line with what you could work with?

Bob Wiltshire: I'd have to see an actual recommendation to say. If there was some sort of recommendation that was tied to the best available science, then I would be more inclined. I think we found out very early-on in

our process that when you use certain words that are open to wide interpretation by everyone, what one person considers preserving the forest, and what another one does, are two totally separate things. I'm a little leery of those kinds of words. As long as I have the microphone, I will just add that we currently, let me back away, my employer is currently involved to some extent on the Healthy Forest Initiative because I know that there is quite a debate taking place in terms of language and interpretation and what sort of form that final bill is going to take.

Roy Aserlind: Bob, would it take some of the onus off of it if you were to put, "support the basic concepts of a Healthy Forest Initiative?" It's broadening it just a bit. As I read the Healthy Forest Initiative, it refers to the clearing out of fallen timber, the fuel, the fodder, and considerable thinning.

Bob Wiltshire: I guess once again Roy, the problem I have there is that that is so vague, it's up to who's interpretation? I don't want to sit here and say that I'm not in favor of removing some of these fuels from the forest, because our forests are at a crisis state. There's no doubt about that. I'm just a little leery to sign on to something; I'm very leery, to sign on to something that's not properly defined. And if you go back and look at all of our other recommendations, we're quite specific about what the Task Force is saying; and I'm very reluctant to hitch a horse to something that is much more general.

Scott Bosse: I would just say that, to reiterate some of the things Bob was saying, I think that the Healthy Forest Initiative is a policy document, not a scientific document, and I would be pretty leery about putting a stamp of approval on what is arguably a partisan policy document. If you were going to do that, I would say that the Clinton Administration's Roadless Rule probably has more scientific basis than the Healthy Forest Initiative, and I don't think everyone on this Task Force, or many people on this Task Force, want to put their stamp of approval on that. Maybe I'm wrong?

Karl Biastoch: Could you reword that to just say, "scientific management of the forests in this area?"

John Bailey: Does anyone know what that is?

Karl Biastoch: The Forest Service does have the schools, and they do put out a lot of material, up at Missoula, Colorado State. There is a lot of material about forestry being put out every year, and that is scientifically done. You could base it on that and a lot of the stuff in this Healthy Forest Initiative is coming from research that has already been done.

Bill Moser: It might be well to just delineate the things that are your major concerns that are perhaps going to be encompassed and perhaps not encompassed by the Initiative.

Jerry O'Hair: Well, I knew that this would be controversial, and I think that, as far as the Forest Service goes, they just shot Smokey the Bear. A long time ago that seemed to be the policy, Smokey the Bear, protect the forests, stop wildfires, and then they went in a different direction; and now expect they can put them back this other way. So I knew this was going to be controversial; so I won't be disappointed if it is shot down.

John Bailey: You don't want to change it any? You want to let it go like this? Okay, that's fine. Other comments? Are we ready to go to Step 2? Okay. I will reread the proposed recommendation, "The Task Force support the Healthy Forest Initiative."

Any further concerns or questions, Task Force? Are we okay with this?

Several Task Force members indicated that they are not comfortable with the proposed recommendation.

The Chair is not either. It is fairly well split; it does not reach consensus. And my concerns are that if we were defining the things we want in the forest, I would easily go with it. I think what you were saying afterwards about preservation and things are closer. What that ends up reading like in the end, might say something about taking your ranch too, so you don't know. When they get done with bills in Washington, they're bizarre.

Bob Wiltshire: I guess I would just add to that, Jerry, would you be comfortable if, when the final Healthy Forest Initiative is passed, it says that a healthy forest is created by forest fires, so we let it all burn?

Jerry O'Hair: That's not its direction.

Bob Wiltshire: Well, until it is passed, nobody knows where it is going, and that's my problem.

John Bailey: Well, do you have a recommendation on the side?

Bob Wiltshire: I will work on it, since I was a "no" vote, and our rules do require that, when you veto a measure, you provide an alternative. I will work on an alternative measure to present.

John Bailey: Any other comments on Yellowstone National Park Management or Watershed Management? Runoff? Any comments on Runoff, except that it is going to happen. Okay. Aesthetics? We may have covered this a little in the past. The only comment here is that it is a black hole to make recommendations on aesthetics. That was one of our comments earlier. Anybody want to do anything about aesthetics? Economics? Silence. Spring Creeks? Did we already cover that one? Silence on Spring Creeks, okay. Conservation Easements, we've spent some time on this in the past.

Bob Wiltshire: I could go ahead and take a stab...

#3. Proposed recommendation by Bob Wiltshire:

"County, State, Federal, and private sources be developed to increase the funding available for Yellowstone River conservation easements."

I recognize that there are existing programs in place. Conservation easements have been around a long time. If Andy was here, he could probably tell us the day they started. I would like to see the pool of money available get to the point where we can adequately compensate landowners at market value for easements.

Michelle Goodwine: Bob, I just have a question. When you're saying, "funding available for Yellowstone River conservation easements," are you talking about properties adjacent to the Yellowstone River?

Bob Wiltshire: Well, once again, we're getting into wording. Do we say flood plain? Do we say what? My initial reaction was to say Park County conservation easements, but then somebody is going to say that they want an easement up on the mountainside. I am perfectly willing to except a recommendation on changing that. My intent is to talk about those areas that we are most likely concerned about as the Task Force.

Duncan Patten: This is a wording thing along the same line as Michelle. "Funding available for conservation easements within the Yellowstone River Valley" or "within the Yellowstone River flood plain." So it would be "funding available for conservation easements on or within the Yellowstone River," something like that. It's just flip flopping the words, but it also describes it as terrestrial, not river. In other words, you can't put a conservation easement on the river; we don't own the river.

Bob Wiltshire: "In the upper Yellowstone River Valley," does that work for most people?

Lionel Dicharry: I have a question. Is the upper Yellowstone River Valley upstream on the Yellowstone, or is it up on the mountain?

John Bailey: It is divide to divide. It's like a watershed.

Lionel Dicharry: It's not necessarily the upper river?

John Bailey: It would seem that we are assuming that what we have jurisdiction on is from Springdale to Gardiner.

Lionel Dicharry: So the whole thing is the upper Yellowstone.

George Jordan: That was the comment I was going to make, is change "valley" to "watershed." That way, if when the TMDL process is finished up, you identify some of your tributaries that are contributing a lot of sediment and then some of these agencies can actually address these things, in the tributaries to help reduce sediment input into the Yellowstone itself. So, if you change "valley" to "watershed", it's really more inclusive.

Bob Wiltshire: Kelly, I'd like to make a change that nobody has suggested, and seeing that it is mine, I think I can do that. "...funding available for conservation easements on lands in close proximity to the upper Yellowstone River."

Laurence Siroky: Bob, I'd offer up instead of "close proximity" say "lands that benefit the Yellowstone River." It could be any lands, on any tributary or anything, that would benefit the Yellowstone River.

John Bailey: I just want to remind you that we have a couple of recommendations, one proposes a Park County Bond Issue to protect and preserve agricultural lands deemed to be socially desirable; one to establish a fund with the State of Montana for a new Council, they all look like someone might try to merge them in Step 3. So, you may not need to get there on this one.

Ed Schilling: You're looking at Recommendation #19?

Michelle Goodwine: Eighteen.

John Bailey: Eighteen and 19. We have some other ones that are addressing some of the issues that are coming up, and we don't modify those until we get to Step 3, if we want to.

Ed Schilling: And my impression is, are we talking about county taxpayers paying for this from county tax dollars?

Bob Wiltshire: Maybe. What I'm trying to do is, while I am fully supportive of trying to put a bond issue out to the voters, I think that that is very narrow minded. I think there is a much broader constituency of people out there that are interested in helping in the effort, and I'm trying to broaden that base to include other funding sources.

John Bailey: Other comments? Step 2? I will reread the proposed recommendation, "County, State, Federal, and private sources be developed to increase the funding available for conservation easements on lands in close proximity to the upper Yellowstone River."
Task Force, any final concerns or questions? Jerry?

Jerry O'Hair: I'm going to stand aside on this. I don't believe in the philosophy of land in a conservation easement. I will step aside.

John Bailey: Okay. Any other comments?

Ed Schilling: I guess I would have a hard time taking tax dollars to buy conservation easements when we can't even afford a satisfactory police department, sheriff's department, ambulance service, and taking those tax dollars and buying conservation easements.

John Bailey: Is that a negative on this recommendation?

Ed Schilling: Yes.

John Bailey: How are the rest of the people on this? Okay, so Ed you are the only negative here. Jerry is a stand aside.

Ed Schilling: And I'll hang tough because I honestly believe that we're not going to take tax dollars to buy conservation easements when we've got a sheriff's department that can barely keep enough guys on the streets.

John Bailey: So, would you propose it without County, Ed?

Ed Schilling: I guess when Bob was talking about other sources out there, private individuals, I can go for that.

Duncan Patten: Just a couple of points. One, Gallatin County has an open space bond, and the people voted on that, and that's basically a tax dollar that is going to the County and has bought conservation easements,

and the people voted for that. That is one way the County can be involved. So, it's not taking money away from other sources, it's actually a new funding source. Certainly, Federal and State agencies do buy conservation easements. The Fish and Wildlife Service buys conservation easements on lands along rivers and things like that, so it can be done, and the County can be involved, but it doesn't have to take it out of the pocket of other activities in the County. So, I'm not sure where you're coming from, Ed?

John Bailey: We do have a recommendation right now, that has passed consensus, and that is, *"Propose a Park County Bond Issue to protect and preserve agricultural lands, scenic views, socially desirable riverscapes, and important riparian habitats along the Yellowstone River; and establish a representative Citizens' Advisory Council to develop criteria, to recommend expenditures, and to facilitate approval of projects funded by public monies."*

Ed Schilling: And when that passed in Gallatin County, the way that I understand it, it was not all land that gets taxed for that purpose. Some agricultural land was taken out, and I go along with that, as long as the criteria is based on who is getting taxed for this bond.

John Bailey: Well, that criteria finally gets set by the County, not by us.

Ed Schilling: When this went to the voters in Gallatin County, I'm not sure how it all happened, but there was certain agricultural land that is exempt from putting into this fund.

Duncan Patten: That is how it got passed.

Bill Moser: I was told several months ago that last fiscal year, Park County was eligible for over \$12 million in grants, and zero was applied for, and that might have some effect on proposal #3 [this proposed recommendation #3].

John Bailey: So Ed, I hate to come back to you, but our rules state that "Participants who disagree with a proposal are responsible for offering a constructive alternative that seeks to accommodate the interests of all other participants."

Ed Schilling: And I think recommendations #18 and #19 pretty well cover that as far as the bond issue, if we want to design it maybe like Gallatin County.

John Bailey: Except that this one is bringing in private monies.

Ed Schilling: I'm all for that, so I could go along with this if we left out "County".

John Bailey: Are you going to make a recommendation?

Ed Schilling: Okay.

John Bailey: Thank you.

Ed Schilling:

#4. Proposed recommendation by Ed Schilling:

"State, Federal, and private sources be developed to increase the funding available for conservation easements on lands in close proximity to the upper Yellowstone River."

Scott Bosse: I was going to suggest that maybe if you change it to "County, State, Federal and private sources collaborating to increase the funding available." By saying that, you don't commit the County to tapping taxpayer funds, but they would collaborate maybe on grants and other sorts of projects.

Ed Schilling: I agree with that, as long as it is not just taking out of tax dollars, per se. If we're doing it as something like that in Gallatin County, that is a whole new different story, and we already agreed on a recommendation doing that. As far as this recommendation, if you leave "County" out, it's fine.

Bob Wiltshire: I guess, Ed, I just don't see anything in there that says that we're recommending that we levy taxes on the citizens of Park County to pay for conservation easements.

Ed Schilling: And you're not taking it out of, or taxing the taxpayers. We're saying that maybe we're taking it out of the General Fund.

Bob Wiltshire: And maybe we're not taking from anywhere. Maybe the County is saying, "Okay, you can share office space with the Red Cross in the City/County Building." And the County source is being developed to assist in the program. Automatically looking for what is the worst case scenario—the sky is going to fall on us—on every one of these recommendations that are coming up, I think is being short-sighted by all of us that are doing that.

Jim Barrett: I think it says, "sources be developed," so they're not existing taxes; they're something new. It seems to me that that covers that, at least that is what it looks like.

John Bailey: Other comments? Are we ready for Step 2? The Chair will reread the proposed recommendation, "State, Federal, and private sources be developed to increase the funding available for conservation easements on lands in close proximity to the upper Yellowstone River." Any final concerns or questions from the Task Force? Are you a stand aside again, Jerry?

Jerry O'Hair: Yes.

John Bailey: Are we comfortable with this? I see no one against it, so this recommendation reaches consensus. It will probably come back up in Step 3, I suspect.

Recommendation Passed by consensus:

"State, Federal and private sources be developed to increase the funding available for conservation easements on lands in close proximity to the upper Yellowstone River."

John Bailey: We're on the topic of Conservation Easements. Any more comments about Conservation Easements? Hearing silence, we're moving on. Scientific Procedures.

Duncan Patten: We should all be in favor of them.

John Bailey: Any discussion or comments on Scientific Procedures? Hearing silence, we're moving on to Cumulative Impacts, and this is the one we haven't really dealt with. The researchers are just getting to where they can start looking at this.

Duncan Patten: What does this mean?

John Bailey: You're the one who is supposed to tell us.

Duncan Patten: I'm supposed to tell you what cumulative impacts are?

John Bailey: Yes, that's what I thought you were asking the question about.

Duncan Patten: Oh no, I can tell you what cumulative impacts are, but I assume most of you know.

John Bailey: All I was saying was that that is the one we haven't really seen...

Duncan Patten: That's where we are headed.

John Bailey: That's where we are headed, after the Task Force has finished, in essence.

Duncan Patten: I'd like to think that some of the integration is going along with your thinking as you create these recommendations, in a sense, a cumulative form of understanding. But in terms of formality on

cumulative impacts—where you look at increasing impacts of either one kind of development, or multiple types of developments on the river and flood plains—that’s something we are doing in our research; but we haven’t really developed it to be able to present at this moment. But it’s certainly something we intend to tackle. I think this group should recommend, encourage, that we take it to fruition on the cumulative impact studies, which the Corps has to do.

John Bailey: Any comments anyone? Brant?

Brant Oswald: Since it is being pointed out to me that I am the one who raised the issue [looking back to the original comments made by the Task Force concerning this issue], and I certainly think that is one of the reasons why we did the studies (to try to see if we have adverse cumulative impacts). The question that I raised to Duncan some long time ago, was how much of that sort of analysis would be done? And how much integration would be done with all of the individual studies? I guess maybe I can just raise that question again and we’ll get to a recommendation.

Duncan Patten: We hope by the workshop in October that we’ll be able to put quite a bit of that together, but it will be post this set of recommendations. It is definitely the goal to not only take the modeling beyond the individual models of each of the studies, but also to integrate them, and then to take a look at them in terms of multiple impacts—not just bank stabilization, but other aspects of impacts on the river—and see if we can show what the impacts of those are on a cumulative basis. It’s not an easy thing to do, and I’m not sure we have all the data to be able to do it. Some of it may be conceptual.

John Bailey: Other comments? Are we ready to move on? They’re agreeable tonight. Research Investigations. How many recommendations have we made for further research? I come up with about eight of our recommendations that are for further studies. Do we need more, further studies?

Bob Wiltshire: I guess that this is the best place I’ve seen so far to introduce this. I’ve been asked by a member of the public—identified as the most fitting Task Force member—and asked to introduce a recommendation, and these are my words:

#5. Proposed recommendation by Bob Wiltshire:

“That the drilling site known as Hobbs Well be thoroughly investigated to determine what, if any, impacts it has created on subterranean and surface water flows.”

A little bit of background on this, and I’m glad Bill Moser is here this evening. I’ll be putting him on the hot seat here. Bill Moser has brought to the attention of the Task Force the situation surrounding the Hobbs Well, which was a well site drilled near the Arrowhead School, I believe by Montana Power; and there is some concern that they pierced a rock barrier layer, and that it could have some potentially catastrophic impacts on water exchange between two subterranean bodies of water that have been separated up until that point. I would ask that specific questions be directed to Bill because he knows a whole lot more about this, and all I did was raise it.

John Bailey: Comments, Task Force? Michelle?

Michelle Goodwine: I don’t know enough about this to comment either way, or to support it or stand aside or anything. So I guess I’d like to have Bill’s comments too. This is the first time I’ve ever even heard of the Hobbs Well.

John Bailey: You haven’t been reading.
[Bill Moser presented the Task Force with written comments concerning this issue on May 16, 2003].

Michelle Goodwine: I guess not.

Roy Aserlind: If I may add, it says, “determine what, if any, impacts it has created.” Would it be feasible to put in “will create”? Because as I read Bill’s presentation, I was looking into the future, maybe in a year, maybe two years, three. That’s when the major problems will come.

Bob Wiltshire: Yes, “it has or may have.” Does that work, Roy?

Roy Aserlind: It's yours; you go for it. Those are both past tense.

Bob Wiltshire: I accept the intent of what you're asking, so I want to...

Roy Aserlind: Does this subsume the potential for problems two years, three years, four years down the road?

Bob Wiltshire: I guess that's what I'm intending to get to by "may have."

Roy Aserlind: That's past tense, isn't it? "May have already created." It will have a future impact. I don't know, I guess we're just kind of playing with words.

Bob Wiltshire: I've never been good at English, so...

Kelly Wade: How about, "has created, or may create"?

Bob Wiltshire: I will accept those changes, Kelly.

John Bailey: Laurence, is all the well stuff addressed by the DNRC? Can DNRC deal with this? I'm curious, having been on a DNRC Board once, there was a lot of well stuff there, all kinds of stuff, and I'm trying to refresh my memory on what are the capabilities there?

Laurence Siroky: I don't know what the purpose of the Hobbs Well was, if it was for natural gas or oil or water?

Bill Moser indicated that it was for oil.

There is an Oil and Gas Board, and they do have well construction standards that require casings and sealing and that sort of stuff. I'm surprised that if it is a well that has been abandoned, that it isn't already sealed properly. But if it isn't, the Oil and Gas Commission can order the driller, or the company that drilled it, to fix it properly. I know there are a number of wells in Petroleum County that were drilled years ago, and there's nobody around that has any connection to those wells. There were grants that the Montana Legislature gave through the Water Development Program to properly abandon those wells. So, if that is the case, there are grant funds available. Of course, you have to apply and be ranked against other grants, but that was one option that Petroleum County used.

John Bailey: Thank you. Bill, do you have comments on this?

Bill Moser: Not more than what was in the letter. I'm fairly certain that the chief engineer and the chief geologist [on that drilling project] would be dead by now; but the logs are all in Billings, in whatever that place is down there.

Laurence Siroky: Oil and Gas.

Bill Moser: The problem with not properly sealing it, 3,000 feet or 1,000 from the surface. The problem was that they had drilled into an eggshell. The well is a hot water aquifer. And the guys sat there at the table for several hours and we talked, and they put close to \$3 million—is my recollection—trying to do something about the water falling out of the bottom of that hot water aquifer. And finally, it was not the accountants, it was not the geologist, it was the top people at Montana Power that were afraid they were going to drain Yellowstone Park, and they pulled the plug on the project. They did use these slurry pumps, where you pump the dry cement down the hole, and by the time it gets 5,000 feet down the hole, it is mixed and pretty well set. The question I have, from observations in the Paradise Valley, is whether that bottom seal actually took, or whether it was eaten out in the volcanics/Balkanics that is the rock structure at the level they were drilling. That covers a great deal of what was in the letter; and I appreciate Bob following up on it. Thank you.

John Bailey: Well, should we be directing this then to DNRC? It seems to me that maybe it should be directed here. Is that the Oil and Gas?

Laurence Siroky: It would be the Oil and Gas Commission. My guess would be, if this is a recommendation to the Governor, the Governor would transmit that to the Oil and Gas Commission. The other option would be the

Bureau of Mines, or something within some sort of groundwater study. But of course, they would need the funds to do that.

John Bailey: Do you want it as is?

Bob Wiltshire: My personal problem here is that I am not comfortable enough with the various subdivisions of the government to know exactly who I want to direct this to. If we direct it to the Oil and Gas Board and they say it was a dry hole, there was no oil and gas there, would that be the end of it? I have no idea?

John Bailey: That's probably where it is going to go anyway.

Bob Wiltshire: That might very well be, and in that case, somebody smarter than I am is going to make the decision on where that is going to go. So I guess from my perspective, John, I prefer to leave it.

John Bailey: Okay. Any other comments? Are we ready to go to Step 2? I will reread the proposed recommendation, "That the drilling site known as Hobbs Well be thoroughly investigated to determine what, if any, impacts it has created, or may create, on subterranean and surface water flows." Task Force, do you have any further concerns or questions? Hearing none, are we comfortable with this? This recommendation reaches consensus.

Recommendation Passed by Consensus:

"That the drilling site known as Hobbs Well be thoroughly investigated to determine what, if any, impacts it has created, or may create, on subterranean and surface water flows."

John Bailey: We're now on the topic of River Substrate. Anything else on River Substrates? Next one, Land Use and Land Cover. Comments? Any recommendations, any comments on this? Most of our original comments came from the study on Land Use lead by Dr. Andy Hansen. Hearing no comments, we'll move on to River Channel Changes and Side Channels. Have we covered that? Any further comments on River Channel Changes and Side Channels?

Duncan Patten: Do you know where this came from? There was a lot of discussion in the Fisheries research on that, about the importance of side channels and all the rest, to maintain side channels.

John Bailey: What happened was Liz took some of our meeting comments that didn't fit under our 12 Topics of Consideration, such as Bank Stabilization, Permitting, and the like, and created new topic titles. Bob, did you have any river channel changes and side channel comments, in addition to what we've done?

Bob Wiltshire: No.

John Bailey: Okay, we just went through all of the additional topics listed under "Other." I wanted to go through all of them, one by one, to make sure people had a chance to comment on them. Any of these topics can still be brought up, if you wish. Then, if we are comfortable, we've gone through the entire 13. We'll now move on, ahead of schedule, to Indicators of a Healthy River.

So Duncan, both Brant and I have a comment in here that we are supposed to ask the TAC to determine what the thresholds might be, and getting back to thresholds on various things. Is there some way we can say—in a recommendation—whether they're five-, 10-, 25-year spans, thresholds that people should look at? Because we have some data from what we've done, that they could compare it to, to see if there is change. It may be good or bad.

Duncan Patten: I think when you look at thresholds, obviously, each one of the parameters or factors that we studied or focused on concerning the river, would have different thresholds. So if you start the monitoring program—I'm hoping somewhere in these recommendations you state that there is a need for continued monitoring of the river, and the health of the river, in quotes "health" of the river. Some components you could monitor every five years; some you need to monitor on a regular basis, it could be every month. Those are the kinds of things you are looking for; how often do you have to monitor to be able to essentially tell you when you're reaching a threshold. I look at this "Indicators of a Healthy River" and, if I

was sitting on the Task Force, I'd recommend that using the data that we have generated, we encourage the scientists to develop indicators or indices that can be used in the future by agencies and others who manage the river to determine its condition. Essentially the research is telling us what's there today, and we can continue to do that, but are there components of the outcome of the research that basically could be used as indicators or a combination of them, creating an indices of some kind or another, to tell us something about the health of the upper Yellowstone. It is quite different than the lower Yellowstone, although some of the same indicators might be used. That's a possibility, and I sort of meandered off of your question, but I study rivers, so I meander too.

John Bailey: Brant, are you writing something down there?

Brant Oswald: I'm trying.

John Bailey: Any other comments on Indicators of a Healthy River? Do you have any Bob?

Bob Wiltshire: No, not on this one.

John Bailey: Any other comments?

Karl Biastoch: The basic things you could do for indicators, like Duncan was talking about earlier, are macroinvertebrates. Just on a regular basis, maybe twice a year when you have insects in various places along the river. It gives you a pretty good indication. The other thing you could do is, if the State is taking water samples for any reason along the river, also use that information to gauge whether you have changes in the water.

Duncan Patten: I'm assuming by "healthy river" we're going beyond the water itself. We're talking about all the things we've been looking at. The river is all the things that make the river, that's the channels, and flood plains, and all the rest. I assume that's what we're talking about.

John Bailey: Right. I'm almost wondering if we want to go back to his recommendation that we let the scientists come up with these. We have so little time, as far as having this go to the TAC, to come back to us. I'm not sure the time is there in our timeframe now.

Bill Moser: Each of the presenters was queried at one point or another concerning were they able to do any critical point analysis, which is a relatively recent mathematical technique. It would be nice to have critical points established for a lot of the studies, but they all indicated that they didn't have data sufficient in their studies to do any of that sort of thing. It's very unfortunate because critical point analysis can identify a problem at the point where it is not a problem and the point when it is a problem.

Duncan Patten: That takes a certain amount of experimentation.

Brant Oswald: I'll take a stab at this, and I will encourage modifications here:

#6. Proposed recommendation by Brant Oswald:

"Encourage the scientific community and agency personnel to develop a set of indicators to provide for long-term monitoring of the upper Yellowstone study area."

Brant Oswald: I'd ask your opinion, Duncan, whether there is some unease of using the cover term of "health." I don't know if there is any other language that we could use, other than just saying "long-term monitoring." I haven't made that very specific, but I'm not sure if we want to.

Duncan Patten: Well, you used "long-term monitoring" to observe change in the long-term condition, and that implies "health."

John Bailey: One thing, Brant, I wonder if we want to use the Cooperative Agreement that is signed by...Liz, who all signed that?

Liz Galli-Noble: The local entities are Park Conservation District, Park County, the City of Livingston. The State representatives are DEQ and DNRC and the main Federal contact is the US Army Corps of Engineers, but they represent lots of other entities as well. Concerning this issue, let's not forget MSU.

Duncan Patten: That Cooperative Agreement is one thing, but what this is encouraging is the people that really have been working on the river and gathering the data, to go the next step. It isn't going to happen in the next month or two, but I think many of them are continuing to study here. Maybe you need to say something more than just "encourage the scientific community" with "we encourage political entities," or whatever, encourage the Corps to encourage the scientific community and agency personnel in the development of these indicators. Do you see what I'm getting at? In other words, because there are a lot of things that people will go ahead and do, if they're interested in it; but it would be nice if this group came out and said, "We really encourage the State and other entities to get the scientific community to work on this." Maybe that's implied by a recommendation to the Governor, since that's where these are going. I might also add, "the set of indicators to provide for long-term monitoring," I'm not sure that it's a set of indicators to be used in long-term monitoring of the upper Yellowstone.

Brant Oswald: Okay.

George Jordan: Just because you have the indicator, maybe some wording in there that says that there is a long-term monitoring plan that is established and enforced, or something along those lines. It's pretty easy to come up with a set of numbers, but actually getting people out there doing it; I think Duncan was kind of eluding to that, is to somehow get funding for a long-term monitoring plan and actually see it through; instead of just coming up with some numbers and standards, but actually doing the work and doing long-term monitoring.

Duncan Patten: Isn't there a recommendation for long-term monitoring somewhere else?

Liz Galli-Noble: The only other monitoring was for USGS, and that was specifically for structures, wasn't it John? That was originally your recommendation.

Recommendation 7/08/03—Passed by Consensus

"Encourage the US Geological Survey-Helena and the US Geological Survey-Biological Resources Division to monitor and measure the effects of instream structures on the river over time."

John Bailey: Comments?

Scott Bosse: I was just going to suggest one word in front of "monitoring," and that's "ecological," if that's what we're talking about. Unless you're talking about monitoring also socio-economic issues.

John Bailey: It is one of our studies. Why would you eliminate it?

Scott Bosse: That's why I brought it up.

John Bailey: We have a recommendation that passed last time to have a study looking at the social carrying-capacity of the river. That's another indicator, people think it is an important indicator.

Scott Bosse: My suggestion is just that if this is intended to be ecological monitoring, that we just insert the word "ecological" in front of "monitoring." Otherwise, just leave it the way it is.

Duncan Patten: Socio-economic aspect is a form of monitoring, so the implication is ecological.

Karl Biastoch: Duncan, are these indicators, wouldn't they be basically the same for the other rivers, right?

Duncan Patten: No, basically there are river processes and there are components of the river system that all rivers have, but the magnitudes of the processes and things like that vary from river to river. So, you can sum up a set of indicators there, they're five indicators of river health, I mean that kind of thing has been developed. The methodology is not applied across a bunch of rivers. There are indicators out there, and if

the scientific community is developing indicators here, they may take the set of data that they have generated and see how that fits into other indicators that already exist out there for other rivers, and adapt those indicators. There are some that are out there, so in a sense, each river is unique, you're right, but the processes that are going on in the river are not unique. It's magnitudes of those processes, variation of composition of biota and things like that are vary from river to river.

John Bailey: Comments? Are we ready to move on?

Lionel Dicharry: No. Not to be a nit, but it seems to me that we've been talking through all the other recommendations about the Upper Yellowstone River Study Area.

John Bailey: But that's all we have to recommend on. Oh, you don't have the word "river" up there.

Brant Oswald: I'd like to actually develop a little bit more in a couple of minutes and maybe talk to a couple of others in terms of expanding this recommendation. Unless there is objection, I might ask that we actually table this, just so I can work on the language, and I can bring it back next week. I'm hoping this one won't be terribly contentious, but I'd like to get the wording correct. I think maybe talking to some agency personnel might be an easy way to do that.

John Bailey: That may be. It's only 8:25 p.m. right now. I'm not sure where we're getting tonight, or we're quitting early, one of the two.

Brant Oswald: Well, then let's do some of that, some off-the-cuff writing.

John Bailey: The other option is to try to go with this one, and then come in with another one.

Brant Oswald: Well, what I'm hearing from Duncan, which I agree with, is that the recommendation should establish a program, having some sort of program, rather than just encouraging the researchers to do the research. Have a program that would allow us to coordinate the research that is done from here on out. I'm not sure what wording we need for that.

Liz Galli-Noble: If I may be so bold, something that has come up several times is to have MSU be the lead for a future science program on the upper Yellowstone. That idea has been kicked around a lot by lots of different people. I guess I don't really understand why it hasn't surfaced here?

Bob Wiltshire: I guess the question I would ask is does anybody have the authority to tell MSU what to do?

Duncan Patten: You could recommend it. I've talked to them and there is interest.

Bob Wiltshire: I think that there are people, just from what I know, people that would love to do it; but the fact of the matter is that there has to be money coming from somewhere.

John Bailey: I just want to back up a minute. This may certainly be overruled but, at the speed we're going tonight, it seems like we are going to make our way through all of our Topics of Consideration. So what I had thought, once we got through all of the topics, what I would recommend for the next meeting, that we would start looking at the recommendations that we have completed—and I do this because in Step 3, it is very clear that we can modify, but we can't come up with new ones. One of the things is to take a look at what we have, and then say "Are there some overriding things here that we still want to add in there?" And spend the early part of the meeting on that, or identifying if there is something that we just totally forgot. And then move into Step 3. I bring that up in the sense that some of this battering around might be part of that. We've got a lot of studies, and on and on, does someone want to recommend that we need somebody to look after this, or whatever? That was one of my thoughts of what we would do when we got through these. I bring that up because, if you're waiting for the next meeting, I wanted you to know what I was thinking. If we need another meeting to make recommendations, fine, say so. It may take us more than one to get through Step 3.

Now, back to this. Do you want us to take a five-minute break?
Okay, we're taking a five-minute break, an unusual thing for the Task Force.

Break

John Bailey: Let's get the meeting back to order. Brant, do you want to tell us what you've come up with?

Brant Oswald: I think rather than have Kelly wear out her strikeout key on her laptop, I will withdraw Number 6 and replace it with Number 7.

#7. Proposed Recommendation by Brant Oswald:

"That Montana State University serve as the lead organization to coordinate efforts by the scientific community and agency personnel to develop and implement a long-term research and monitoring program on the upper Yellowstone River study area."

Brant Oswald: I think two things here: this incorporates the idea that we would be recommending that MSU serve as the entity to coordinate long-term monitoring, and the discussion that we had during the break was that, even though we started with the concept of indicators, it is what led us to address the recommendation, the development and implementation of long-term research and monitoring program need to follow those sorts of indicators.

John Bailey: Comments from the Task Force?

Jerry O'Hair: How broad is it—long-term research and monitoring?

Brant Oswald: Certainly the idea behind this is to continue the same sort of issues that we've been looking at all along in all the other studies that we have done, but to continue to do monitoring. As Duncan pointed out, we included the term "research" here just because there may be, at some point, additional studies that need to be done; that we may not have in mind at this point. And this would give us the ability to do it.

John Bailey: I think one of our problems is that some of these studies may not get done for 25 years. That's certainly been a concern of mine, if we walk away and we don't show that there is a long-term need, that no one sat down and looked at different things and said that the bird study ought to get done every 50 years, every 25 or something. Or maybe they don't even think it should be done again. I don't know? But we can certainly have our studies and maybe something in the future. We indicate that the river hasn't changed much in the years since 1948, where we have the best data. The cottonwoods certainly gave us a longer look. My view would not be that we're doing this every year, because I think we're looking at indicators that are longer, and probably macroinvertebrates are the ones that show the quickest change, correct?

Duncan Patten: Macroinvertebrates? Yes, they respond relatively quickly, but there are a lot of things that respond quickly, and there are others that don't. The idea behind this is that obviously we haven't studied everything. As we understand the river more, there are going to be research needs; there also will be—in monitoring something we believe in—the need to see what's happening to the river. Any monitoring program is based on adaptive management, which means you understand what is going on, and then you adapt what you're doing, and you adapt your research and things like that, to better understand the system. How long have we been at it? Three years; that's not very long.

Steve Holnbeck: I just want to understand what might be envisioned here. For example, in the past on other river systems—an example being Redwood Creek in California, after the 1964 flood that really ripped it all up—the USGS entered into a long-term monitoring program where they set up benchmark cross-sections to resurvey them over selected intervals; to see if the river was cleaning out the gravel or if gravel from upstream was continuing to fill in the lower reaches of the river. This continues today, as far as I know. So just to get a sense, the way that this is worded here, that if the USGS in Helena decided to work on a proposal of sorts to do that—to try and monitor the pulse of the upper Yellowstone River over time, as far as the flux of gravel goes—would we enter into a cooperative agreement with Montana State University? Is that the way this language is set up? Might we do this independently of MSU?

Duncan Patten: I don't see this as keeping any other organization from coming in to study the river on its own, either. Joe Smith at Tulane might want to come in and do research on the river and we wouldn't stop them. All this is is a follow-up of what we've been doing. And the hope is that, if USGS wanted to come in—let's say we had another major flood and they might want to come in and study it—let's do it in partnership, or coordinate, because there are going to be other people, there's other kinds of data that you're going to be interested in, in addition to the data you might be getting in your cross-sections. The system isn't just the cross-sections; it isn't just the river; it isn't just the valley; it's all of them put together.

John Bailey: Other comments? Are we ready for Step 2? Okay. I will reread the proposed recommendation, "That Montana State University serve as the lead organization to coordinate efforts by the scientific community and agency personnel to develop and implement a long-term research and monitoring program on the upper Yellowstone River study area."

Task Force, any further concerns or questions? Are we comfortable with this? This recommendation reaches consensus.

Recommendation Passed by Consensus:

"That Montana State University serve as the lead organization to coordinate efforts by the scientific community and agency personnel to develop and implement a long-term research and monitoring program on the upper Yellowstone River study area."

John Bailey: Anything else on Indicators of a Healthy River? Anything on Plan Development?

Bob Wiltshire: I'm not sure if this is where to introduce this or not? I think that one of the recommendations we need to come up with is, "What happens when we are gone?"

John Bailey: I'll come right back to that, but I want to see if there are any on Plan Development, and then I'll ask for anything else. I just want to make sure we cover that.

Bob Wiltshire: I thought I was developing a plan for the future.

John Bailey: Any Plan Development here?

Roy Aserlind: Is there another recommendation up on the screen? Okay. Well, I don't know if you can call this Plan Development or not?

#8. Proposed Recommendation by Roy Aserlind:

"That the Department of Fish, Wildlife, and Parks develop a 'closure' matrix specifically designed for the Upper Yellowstone River, and its own unique characteristics. This matrix is to be used in the event of any future severe, prolonged drought conditions which may necessitate considerations of protection for its fisheries and fish habitat."

Now, obviously this recommendation was made within the context of a long hot summer, stress being seen and acted upon on the Beaverhead, the Big Hole, Jefferson, and Madison Rivers. It is also within the context of water temperatures approaching 72 degrees. And finally, within the context, and I don't know what this group thinks about it, but these impending concerns being expressed internationally about global warming. If you put the effects of global warming, and now, as John keeps saying, we're looking down the road five, 10, 15 years. And who knows, maybe another ice age is coming? That is where this recommendation comes from.

John Bailey: Comments?

Does that mean that there has to be a full-blown drought before this could be enacted? A one-year drought and it could not be enacted? That's the way I read it.

Roy Aserlind: I don't know if the words "prolonged drought conditions" are too limiting or not? I would just say, "in any future severe conditions which may necessitate these considerations."

Joel Tohtz: Roy, in your packet tonight, Liz included a copy of the FWP Drought Fishing Closure Policy, and it's not a rectangular array [a matrix]; it's not that. But it is an algorithm that is to serve that decision, based on

temperature and flow, and also a variety of other considerations. So, in effect, that's already done. It is also published on the State website [fwp.state.mt.us].

Roy Aserlind: Okay. So this would be a redundant type of recommendation then?

Joel Tohtz: Well, I guess my question to you is, do you mean by that recommendation something different than what already exists?

Roy Aserlind: No, not really. This algorithm that you've mentioned, is it specific for the upper Yellowstone, or is it just general statewide? We know the upper Yellowstone River has, as it has been said several times tonight, unique characteristics, and the fact that some of these unique characteristics are keeping it in its present state, in view of what is happening on a number of other rivers.

Joel Tohtz: The answer is that the policy applies statewide to bodies of water containing salmonid fishes, so that would be primarily trout. I'm puzzling over what you said, if there would be some value in making it somehow more specific to the Yellowstone River. Right now it is based on temperatures and what we know about how they influence fish populations. So, in some ways, because of the monitoring that I have personally done here in this area, we calibrate the Yellowstone to things to the general policy, data is unique to the Yellowstone River, simply because the information coming back is unique to the system. I guess I'm circling here, thinking out loud. I think we're already there, is what I would say.

Roy Aserlind: Would you suggest withdrawing this recommendation, then?

Joel Tohtz: We've had several, particularly in reference to State FWP, recommendations that are sort of redundant and they are a specific restatement of what already goes on in this area. And I think at one point in a discussion a while ago at a Task Force meeting, we decided that there was some value in restating the status quo. So, if you would like to restate the status quo, I think you would retain your recommendation. If you're looking for something different than what exists, it will need to be reworked. And it's likely that withdrawing it wouldn't change anything in our policy.

Roy Aserlind: What was that again?

Joel Tohtz: Without the recommendation, this thing that you're requesting, is already in place in the State, whether or not it is a Task Force recommendation. There are benefits to the Task Force sanctifying this type of approach.

Roy Aserlind: Could this sanctify the approach, and represent to our great public out there, our concerns too?

Bob Wiltshire: I would like to encourage Roy to leave this up here, to look at something sort of Yellowstone River specific. As with anything that's general, it's designed for some sort of a common denominator and the Yellowstone River is a unique situation. There are a couple of things that bother me about the statewide plan that Joel has passed out to us. One is clearly identified as "Unresolved Issues," which is shifts in angling pressure. I don't know, is that that the FWP has conducted a monitoring to give us an answer on that? Right here they say that, in effect, if we close the Madison and the Gallatin and the Jefferson, and not the Yellowstone, everybody is going to come to the Yellowstone; and if that happens, we're going to study it. I think there is some good reason to ask for this. I think there are some other things. I personally would like to see some clearer definition of things like we talk about exceeding water temperatures, 73 degrees for three consecutive days. I don't know as we've ever established how those temperatures are taken. Are they taken by the USGS at the gauge station? Where are they taken in relation to the thermal influences of the spring creeks? Or, they've got influences in the Gardiner River.

Joel Tohtz: Good question. In the minutes from the July 22, 2003 meeting, there was some discussion about how temperatures are recorded, couched in different words. There are two USGS gauges, as you know, on the Yellowstone in our area. Our rivers are not the kind of body of water that is amenable to a couple of points, and then make a decision about it. So what I do is take measurements in many locations and then integrate that information for any kind of recommendation that comes from me on the ground. That's true also with every other biologist in my position throughout the state. So, we do not rely only on two gauge stations, for

example; but we do use that information from the gauge stations. As always, with any information, we evaluate what it is, what it does, and what it doesn't do. For example, this gauge at Carter's Bridge, is subject to a pretty extreme influence from the spring creeks particularly at low flows, when the relative contribution of the spring creeks is much greater. We know that. We take into account that affect, and use it with other information, before we go to some sort of regulatory action.

Scott Bosse: Joel, I just wanted to ask why are some rivers closed by Fish, Wildlife and Parks, while others have voluntary closures? And how does the Yellowstone River fit into that?

Joel Tohtz: Okay. In the algorithm, everything falls on someplace. If there is a response plan that is in existence within a river or watershed area, that plan is what is followed, and the other parts of the algorithm are not. For example, the Big Hole River has a plan in place, the Jefferson River has a plan in place. They have trigger points at some cfs value, the level which they will close these rivers, and that is all preordained. Most rivers in Montana do not have that type of plan in place. In those cases, we go through a full series of evaluations which are ongoing every year, even non-drought years, but they only become critical in drought years, for temperatures, flows, angling pressure and considerations are taken into account. That's just part of game management, really.

Scott Bosse: Who develops those plans? The reason I'm asking is because it sounds like Roy wanted something specifically targeted for the upper Yellowstone River; and it sounds to me like that currently does not exist—that you use a general matrix.

Joel Tohtz: It is not a matrix, but yes. I'm not exactly sure that is what Roy wanted. I personally don't think there is anything wrong with keeping that recommendation on the record, frankly. Especially at this point when you are going to go to Step 3 and reevaluate everything anyway.

Scott Bosse: I wasn't judging it, I was just clarifying what Roy wanted, and what already exists. It sounds to me like perhaps this is not redundant.

Joel Tohtz: Local watershed groups are responsible for those other plans.

Laurence Siroky: I guess I could add to that. One of my staff members is a hydrologist and he's been working with the Big Hole Watershed Group, and they came up with a drought plan. That watershed group consists of a fish and wildlife biologist, farmers and ranchers in the area, outfitters, recreationalists; kind of a whole cross-section of people that use the river, use the water. They came up with a drought plan that is a better way of to live through the drought, where they wouldn't be hurting each other during a drought period. It has worked pretty well, and it's compromised of a specific number, it's a number that triggers action, and it's the action that they've identified. In the case of the Big Hole, they have a voluntary list of thresholds, a warning of voluntary limits at some point, Fish and Game has agreed to close it.

Roy Aserlind: I suppose it is quite obvious that if I had this FWP report in my hand a week ago, I never would have come up with this recommendation. I wouldn't have the courage to, in fact. So, where does that leave us now?

John Bailey: Well, Roy, I'd like to comment that the lower Madison has been 78 degrees here recently. It very seldom gets closed, but that's because it's dam controlled, so it doesn't reach the flows... but it is too hot every year. I have real problems with the criteria Fish, Wildlife and Parks set, because they say 73 degrees is critical; but it is not. It seems to me that the lower Madison should close every year, just about. We talk about 80 degrees being lethal to trout, and 78 is a lot closer than 73. I always felt this—the way the matrix works—is the way the Yellowstone ought to be looked at. It doesn't work if we're being put together with the tailwaters, and they have the advantage because they don't get into as much low flow.

Joel Tohtz: You have just underlined the main danger with thresholds, and that is: do you look at that value and then turn off the brain? None of these thresholds are meant to be, I mean what is the difference between 72.8 and 73 degrees, in terms of harm to the fishery? What's the difference between 72 and 73? What's the difference between 71 and 73?

John Bailey: 78 is a big difference.

Joel Tohtz: We've measured dissolved oxygen before dawn of 6 milligrams per liter at 80 degrees. That's below the "happy value" of seven for trout, but they do survive it; and you've already identified why. That body of water is dammed and it's not the temperatures, it's the flow. What I'm really getting at is that it is not necessarily a good idea to go to threshold values, because it misleads people about what is really being considered. Most people are very uncomfortable with the idea that these things take a little bit of interpretation and that 73 degrees isn't an automatic closure, and so forth. We have a great deal of difficulty dealing with that, doing our jobs in a world of a lot of gray, and no black and whites, and then giving the public something that they can sort of recognize as a red flag that a closure may be coming, for example. Basically, if we get low flow and it gets warm, things start getting bad and there may be a closure.

Bill Moser: Firstly, your temperature, you have a riverbed that is putting 50 degrees into the bottom of the river constantly, the mean annual temperature of the ground, so where you're measuring, and the depth of the water, would greatly affect what your temperature reading is, and almost make it meaningless. I don't see where this is actually addressing the problem that was presented last week of: what happened when all these other rivers are closed and everybody comes to the Paradise Valley? It may very well be a different issue, but that was, and rafting and so forth, I don't know how pertinent that is.

John Bailey: Other comments? Are we ready to go to Step 2? Okay. I will read the proposed recommendation, "That the Department of Fish, Wildlife, and Parks develop a 'closure' matrix specifically designed for the Upper Yellowstone River, and its own unique characteristics. This matrix is to be used in the event of any future severe conditions which may necessitate considerations of protection for its fisheries and fish habitat."

Does the Task Force have any further concerns or questions? Are we comfortable with this? This recommendation reaches consensus.

Recommendation Passed by Consensus:

"That the Department of Fish, Wildlife, and Parks develop a 'closure' matrix specifically designed for the Upper Yellowstone River, and its own unique characteristics. This matrix is to be used in the event of any future severe conditions which may necessitate considerations of protection for its fisheries and fish habitat."

John Bailey: Any further Plan Development?
Okay Bob, we'll go to any topics now.

Bob Wiltshire:

#9. Proposed Recommendation by Bob Wiltshire:

"A citizen group be developed to continue to monitor the status of the upper Yellowstone River, to make recommendations about river related issues, to encourage long-term monitoring of river related projects, to promote the completion of identified research needs, and to encourage the implementation of the Task Force recommendations."

I guess the comment I would add to the Task Force is that I think that it is important that some citizen group, diverse citizen group, similar to what we have here—but different—continues on as a watershed group, or as a something. We've laid out a lot of things that we'd like to see happen as things move forward, but if there's no citizen's group to keep people's toes to the fire, I'm not optimistic. I'm also perfectly amenable to changing this.

Roy Aserlind: Under whose aegis would you perceive this citizen's group be operating?

Bob Wiltshire: Their own.

Roy Aserlind: Self funded?

Bob Wiltshire: Yes. I'm not at all asking anybody to fund this group. I think there are grant opportunities, there are places to look. I think that a citizen's group can meet in the City/County building without costing the people a whole lot of money.

Jerry O'Hair: I don't see a whole lot of problem with this except a citizen group, and I'm a little concerned about what that really entails. Who is the citizen's group?

Bob Wiltshire: I'm certainly willing to change that. What I don't want is a group of six agency personnel sitting around saying, "This is what we want to do on the upper Yellowstone." I want it to be representative of the people. If you've got better words, Jerry, I'd love to have them.

Bob Wiltshire: Kelly, would you strike "citizen" and replace it with "stakeholder".

Allan Steinle: When the agencies were developing the Cooperative Agreement, our desire, our recognized need for a group like this one, is one of the reasons we went through that exercise. I don't know if Dave Haug remembers, but we talked a little bit about asking Park Conservation District to try to put together some kind of group like this; something perhaps modeled after the Task Force, to continue to provide citizen input to the agencies after the Task Force is no longer in existence.

Bob Wiltshire: I guess I would add to that, earlier Roy asked me who I envisioned, what authority, and I said "their own," but I'm not adding that. If the District were to take the lead in coordinating the group, I have no problem with that. I think a stakeholder group is going to end up driving the process, regardless of how it is formed, or whose auspices it's organized under. I guess I would add to that the District, in many respects, is a logical partner in this effort, it would seem to me.

Dave Haug: However, would the District be a stakeholder? In a way they are, but you're getting back to your deal of government, a pseudo-government agency, there's a question there. Also, the other thing is the "identified research needs," are you referring to the ones we went through on our recommendations?

Bob Wiltshire: I think that where I'm headed there is maybe twofold. Primarily, and it's already encompassed there, implementing our recommendations, but we have identified, in some of our recommendations, additional research needs. I think we also heard, from some of the researchers, that they felt that there was a need for additional information about certain types of things that we maybe won't encompass all of that in our recommendations. So that's why I put that in there.

Laurence Siroky: In the case of the Big Hole Watershed Group, they decided themselves who they were going to have in their watershed group, and of course a lot of it was driven by the issues. In the case of the Blackfoot watershed group, one of the big issues was weeds. In the case of the Big Hole, it was fisheries and dewatering and that sort of thing. So they were a little different for the different groups; but I believe both those groups decided who was going to sit on it, kind of let the venue decide.

John Bailey: Other comments? I guess the comment I have is that I think for a group to be successful, there has to be a reason the people want to come together, to form, to begin with. There has to be an issue, or issues. I don't have a problem with this recommendation, but it is saying that one of their main tasks is to make sure that our recommendations are moved forward; but I'm not sure that's going to bring a group of people together to want to meet all the time. I suspect there are going to be other issues out there, whether it is the watershed, or some other segment, that'll bring people together. Our recommendations may not be their agenda. I've always had some mixed emotions as to whether or not we can really recommend what comes after us, that our recommendation is going to make a lot of people step up and want to meet under those lights.

Bob Wiltshire: My response to that is that I'm perfectly willing to strike that. I almost did not include that for the reasons that you're discussing. If you're uncomfortable with that, I'm certainly willing to just strike that last part.

John Bailey: I'm not uncomfortable with it, but I...

Bob Wiltshire: I recognize the same thing. If somebody said I want you to serve on a group to do what these other guys decided I may not like it. Does anybody else on the Task Force have any sentiment on leave it or strike it?

John Bailey: Silence. Somebody has got to comment here. Do you want to serve for another 20 years, Jerry? I think there is a valid thing that we should be making this kind of recommendation, and lots of people think we should make this recommendation. I've always thought that people come together when there is a need to come together. There is certainly ongoing studies and the Corps and the SAMP, and on and on and on, but I haven't heard this group asking that we go back and be reappointed.

Duncan Patten: I think Laurence put it out. This type of thing really happens in watershed coordinating groups and all that. People do get together because there are issues, and you do have issues, and those issues will continue. The Task Force has addressed them, the Task Force has made recommendations, that's the first cut. Another group is going to come in and say, "Look at what they've recommended, and do we really support most of these, but let's readdress some of them." That's going to happen too. This statement up there doesn't negate them readdressing issues, and I think you've got to put the Task Force recommendations into a recommendation; that some group coming in there needs to pay attention to what you've done, or why do it?

John Bailey: I certainly wouldn't be against this.

Bob Wiltshire: I wonder about changing "encourage" to "examine."

Scott Bosse: My own experience with this is that watershed groups have to be organic to be successful. In other words, they can't be legislated, or mandated, or called for. It needs to be a group of citizens that are willing to make a real commitment of time, over a long period of time, in order to be successful. As this reads, I would just urge that that last phrase be stricken for the simple reason that whenever I become a member of a watershed group, I don't like to be shackled with any sort of previous group's decisions.

Bob Wiltshire: Kelly, I think I'd like to change the word "encourage" to "examine".

John Bailey: Other comments? Are we ready for Step 2? Okay. I will read the proposed recommendation, "A stakeholder group be developed to continue to monitor the status of the upper Yellowstone River, to make recommendations about river related issues, to encourage long-term monitoring of river related projects, to promote the completion of identified research needs, and to examine the implementation of the Task Force recommendations."

Task Force, how do you feel about this? This recommendation reaches consensus.

Recommendation Passed by Consensus:

"A stakeholder group be developed to continue to monitor the status of the upper Yellowstone River, to make recommendations about river related issues, to encourage long-term monitoring of river related projects, to promote the completion of identified research needs, and to examine the implementation of the Task Force recommendations."

John Bailey: Any other recommendations?

Bob Wiltshire: Well...I would just like to go back to our earlier discussion, when I was one of the people who blocked Jerry's recommendation on the Healthy Forest Initiative. I'm not going to be here for our meeting next week, and so I think it is important that I try to offer something tonight, to try to satisfy, hopefully satisfy, Jerry's concerns and maybe my own to some extent. I would propose:

#10. Proposed recommendation by Bob Wiltshire:

"The Task Force support a scientifically-based program of reducing unnatural forest fuel loads that pose a significant threat of producing catastrophic fires."

John Bailey: Comments? What is unnatural? Can we just take unnatural out please?

Bob Wiltshire: The argument that I hear continually is that we need to take this action because it is not natural to let the forest burn. That, for some reason, these fuels have built up in an unnatural fashion that have now got us at a crisis state.

John Bailey: It reads the same without it, right? It does the same thing without “unnatural.”

Tom Olliff: I think if you read the 10-year forest strategy that the Governor and the Federal government put together, what they would consider an unnatural fuel load is something that has been created by fire suppression. For instance, in a Category 1 stand of Ponderosa Pine, it's missing several fire turnovers; there's usually a 10- to 25-year fire return, and it's been 75 years since it has burned. In that case, I believe “unnatural” is relating to fire in term intervals and I don't mean that a stand is amiss. It is real clearly laid out in the plan.

Dave Haug: I kind of question, possibly they may develop a plan in a year for prescribed burns like Los Alamos and different factors, and I'm not sure if that's one of the options that they'd look at, it probably is one of the options they will look at, if I would be totally in support of it.

Duncan Patten: This follows on Tom's comment. The example he gave is a Ponderosa Pine forest, which unfortunately is being used as the typical forest management for all forests, which is a little scary because in the forests we have here and in Yellowstone Park, there is no Ponderosa Pine forest; it's a lodgepole, which is a fire recovery type of forest, with an understory of spruce/fir, or Doug Fir, whatever is coming in. The catastrophic fire we had in 1988 is the kind of fire that happens once every 200 to 300 years. It is not unnatural, even a fire of that magnitude. The thing that is coming down the pike, in all the literature, is that so much of it is coming out of people that are studying Ponderosa Pine forests, and that is being applied to how we are going to manage our own forests in the West. That doesn't address the term “unnatural forest fuel” but I think Tom addressed that. Basically that's based on a result of one kind of management—fire suppression, for one type of forest. The forests we have out here, you look at one of the Lodgepole Pine forests, you look underneath it, there is an old Lodgepole Pine forest in some areas, there's a stand of young spruce and fir coming under it, or some other secondary succession fuel load of young trees; that's a very common thing. The unfortunate thing is that is also one of the primary, maximum potential for fires, that's where we find a ladder effect and everything else. The fact is they are a natural type of forest structure, and to reduce the fire, we're basically saying we want an unnatural forest structure; and that's where that forest initiative is coming from, and it worries a lot of scientists. This, then, says, “let's do a scientifically-based program,” and that is somewhat worrisome because whose science are we going to use? That's one of the cons of it.

Tom Olliff: The way it seems to be coming down the pike, at least for Yellowstone, is that you wouldn't be 80 percent classified as Category 3, which is, we haven't really missed a fire return. So what we folks know as the wildland urban interface is reducing fuel around structures and critical boundary areas. I don't think I would trust, as Jerry had trouble with, is “lack of large fires.” You still have a large fire in Yellowstone Park, it would probably be considered natural, because we haven't missed a fire return, or else it doesn't appear in the Lodgepole Pine forest, but we'd be focusing more on protecting structures. That would fall well within the return interval. Probably the Healthy Forest Initiative, I'm not sure what that's going to be like, but I don't think it addresses what I perceive as your concern Jerry—large fires. I don't want to put words in your mouth, but that's what I'm guessing you're concerned with—big fires. Just an aside, I was actually half-preparing for this tonight, thinking that was an issue that would come up. It is really interesting to look at “wildland fire use for resource benefit” or simply “fire use,” which is another way of saying “let burn” fires and “suppression” fires; I got some information from 1972 to 2000 in Yellowstone. Of the 338 let burn fires, 283 went out at less than one acre. Most of these let burn fires are real tiny fires. The only ones that were big were in 1988. In fact, between 1972 and 2000, 857,000 acres and some change burned in Yellowstone, 793,000 acres were in 1988. So, between 1972 and 2000, there were really not a whole lot of years that had a lot of fire, except for 1988. I just found that kind of interesting.

Scott Bosse: I just wanted to ask the Task Force how you would feel if you substituted the words “forest fuel loads” for “flows” and “catastrophic fires” with “catastrophic floods?” And the reason I make this point, is because fires are to Lodgepole forests what floods are to the Yellowstone River. It is an essential part of what makes the system healthy and I think it would greatly diminish the credibility of the Task Force to take a position like this that runs, frankly, counter to the prevailing science out there.

Jerry O'Hair: I don't think all of us have bought that; I haven't. I went through the fire in 1988, and I also went through the Fridley Fire. If you tell me that that is beneficial, it may be beneficial in the eyes of some who just randomly burn acres and acres of forest that you no longer think you have a use for. And there are other ways of taking care of forest fuels than burning them. In spite of the fact that the logging industry has been annihilated in Montana and the western part of the United States, there is still a need for timber and lumber; and so there are other ways of suppressing fuels than just burn. I don't buy it.

Karl Biastoch: Lodgepole actually have two ways of regenerating, and one of them is with fire. But the other one is, if you clear the land, seeds will come down and they will take off. It's been proven many times. So fire is not necessarily the thing that is needed for regeneration. There are places where they've had massive blowdowns and the trees come up from below without being burned.

John Bailey: Other comments? Are we ready for Step 2? Okay. I will reread the proposed recommendation, "The Task Force support a scientifically-based program of reducing unnatural forest fuel loads that pose a significant threat of producing catastrophic fires." Any further concerns or comments, Task Force?

Brant Oswald: I guess I just need to say that I think it's clear that the constituency I'm representing would not support this recommendation, and I think I won't be able to support it. The concern that I have is that, as they say, the devil is in the details; and if there were a scientifically-based program that could do all this, then I think there wouldn't be the resistance to it; but the implementation of that kind of idea, and how those fuels are reduced, I'm not sure that it's clear that there is science there that will tell us how to do that.

John Bailey: Other comments? Are we comfortable with this?

Bob Wiltshire: I would just like to say that I'm going to stand aside on this.

John Bailey: The Chair is uncomfortable, also.

This does not reach consensus.

And I'll speak for myself, when we started, we said that we were going to let science lead us, and we have no science on this subject, and I can't go there. I'm sympathetic with the concept, but I think that we sort of destroy what we said all along, that science is leading what we want to do, and I don't have the science to recommend this. I think maybe we stepped out of bounds. Brant, I think you made your comment. Rod, you were not happy. Do you want to make a comment?

Rod Siring: It seems to me that we're reaching an awful long ways out there; trying to legislate things that might be, more or less; had our hand on our other things.

John Bailey: Okay, thank you.

Bob Wiltshire: I'd just like to mention that I stood aside on my own recommendation. I agree with several of the things that you guys are expressing, especially what Rod is saying. I think we're starting to move way outside of what our charge was from the Governor on this. But I did feel it was important that I try to make a recommendation to address Jerry's concerns, because I was the one who stood in his way with his proposal.

John Bailey: Any further recommendations? The Chair has one. I've been trying to do this for a couple of meetings, and then I wanted the floodplain maps to come out, and I'm a bit confused by what the Corps is doing. I once was going make this recommendation just to have someone do this, but I believe now, with what I've heard, the Corps is doing a 205 Study in Livingston.

#11. Proposed Recommendation by John Bailey:

"The US Army Corps of Engineers include in their 205 Study an investigation of widening the channel in a stepped method, around cross-sections 55,000 and 56,000 on the floodplain map."

John Bailey: My thought here is that it seems to me over the years, every time we are having a flood we put more riprap in; and that's a narrow place. When I walked the bank this year at 9½ feet, the water was way,

way down that bank; and I keep wondering as I see the cottonwoods back behind the dike, I keep wondering what happens if we take the ground down and still leave it somewhat higher than where even the 9½ -level was this year. We strip it back so that in that catastrophic event we would have lower water. I'm not talking about taking the bank that the river is active against, even in the highs, but can we open that up so we have a stepped bank, where people could be walking closer to the river, or whatever, and lower the level of the river in a big flood, that is the reason that now we're looking at certifying a dike in Livingston. I'm wondering if we can lower that and maybe solve some of that issue with the dike and the floodway through Livingston. I'm not trying to affect the active bank. Comments? Bob?

Bob Wiltshire: You are talking about just one bank of the river, and not both banks?

John Bailey: Well, the other side has a cliff.

Bob Wiltshire: Okay. So you're not proposing dynamiting the cliff?

John Bailey: No, only the bank that we keep encroaching the river on.

Roy Aserlind: You mentioned that this would increase the flow of the river, and I'm assuming you're also referring to the upstream height during the river?

John Bailey: It would lower it; I would hope it would lower it.

Roy Aserlind: That's what I mean, lower it.

John Bailey: I only said "investigate," I didn't say "do," because once they show me what happens, I might be against it. But I would like to see the option. Talking to two different Corps people, one said they are not looking at that, and Michael Gilbert said they were. I don't know if they are or not? But I think in the urban stretch we have to be looking at alternative needs.

George Jordan: Would that just be "reterrace"? Is that what you're talking about?

John Bailey: Right. I don't know if that step is the right word; we're talking about a bank and then coming back and then going back up again.

George Jordan: I guess when I first read it, I thought you were talking about stepping the streambed down.

John Bailey: Oh, no. I'm talking about the bank, and I don't know the right terminology. Does anybody?

Steve Holnbeck: "Terraced" or "stepped." You're talking about the streambank stepping, not the channel.

John Bailey: Right. This year you could see at 9½ feet it is way down that high bank we have. If we have to pull the thing back to Fleshman Creek, the public will be against it. If we only have to pull it back as far as the cottonwoods are, and we can go with that, then I think maybe they can get a dike certified, that we don't have to lose Sacajawea Park again, and other things. I think there are a lot of people in Livingston that aren't very happy with the dike that was once there, so hopefully we don't have to go back to there. Maybe there are some alternatives, and maybe if we're looking at alternatives here, it would give us better ideas where there are other problems, I don't know.

Steve Holnbeck: You could add, this is just a suggestion, "in a stepped or terraced fashion".

John Bailey: That's fine. Other comments?

Laurence Siroky: When Colleen Horihan was here, remember she is an engineer with the Corps of Engineers. I did bring this issue up to her, and she is aware of it. I don't know whether she will look at it or not, that's up to her...

John Bailey: She told me they were not looking at it, and Michael Gilbert at the next meeting said they were.

Laurence Siroky: I just want to point out that I did point that out to her, so she was aware of that kind of consideration.

John Bailey: I didn't know if the Task Force would like that kind of consideration.

Laurence Siroky: One of the things that she brought up was that there are a number of landfills in that area that would be a concern; it's not with the hydrology, it's these landfills that are in that area, old land dumps, old landfills, dumps.

John Bailey: That's a concern of mine, but if the river goes under the dike, nobody is safe, and if those land dumps are there, I'm not sure that, I've never had confidence in the dike on the river.

Laurence Siroky: The dumps right next to the river is not a good thing either.

John Bailey: Well, we only have three, that I'm aware of. There may be more. Any other comments?

Scott Bosse: Would it be worth adding at the end of this recommendation, "as an alternative to raising the bank?" I don't have a mandate for that, I'm just asking the question.

John Bailey: I've thought about this recommendation for some time, and I never wanted to actually take action. When I see the results of what they have to do to make it effective, I might be against it. I don't know what has to be done? So I'd like to see someone at least do a study. If the floodplain maps hadn't come out, I was going to actually put on there that they do the study and it has to really be presented to the public and debated quite a bit. Now, with the City's problem, and a certified dike takes them out, I see a train wreck coming from what my own view is here; that's why I'd like to see this; Colleen indicated that this was not part of what they were doing. Mike Gilbert said it was. Steve, do you know if it is?

Steve Golnar: I think David Chandler is the guy with the Corps of Engineers in the Section 205 Study. I've talked with him a few times about this and he's indicated initially that they've looked at a number of options, that they're concerned about. I guess I'll have to get my mind around where your Section 55,000 is and 56,000. Are you talking pretty much about where John Long's property starts?

John Bailey: Well, it's just upstream. 55,000 is the bedrock that comes across right at the fence.

Steve Golnar: Right. So, it's right behind the baseball and the girls' softball field over there, where John Long lives.

John Bailey: And from what I've been told, that should be the controlling factor.

Steve Golnar: I guess it would depend on how far you go back. They did identify some concerns about existing landfills. They also indicated that the Corps of Engineers and the Federal government wouldn't participate in the mitigation associated with any existing landfill, and that would be probably a local responsibility, and that could be anywhere from the State on down. But that would be another problem we'd have to look at. But it's certainly, I think, worth looking at, and trying to figure out what the alternatives are.

John Bailey: What I have no concept of is how far one would have to bring the bank back to effectively lower the river? And until I saw that myself, I'm clueless as to if I could even support it. There are two local landowners just downstream, so it is a complex idea. But until one knows what the issues are, none of us can deal with it. That's why I just say "investigate." I don't say "implement." I might lead the charge against it. I don't know what it is yet. Other comments?

George Jordan: Just semantics. When I read that about the channel and then there is "stepped or terraced fashion," maybe, just so somebody else reading this who isn't in this room here hearing your explanation, if we could say, "Study an investigation of widening the channel by resloping the north bank, in a stepped or terraced fashion." So you're focusing on the bank and not the channel itself.

John Bailey: You're correct, I would agree.

Bill Moser: You're not actually even considering, let's say the word "enlarging," instead of "widening," you're not considering dredging?

John Bailey: No, not going into the active channel at all.

Bill Moser: Primarily because the bridges downstream are going to control that sooner or later anyway.

John Bailey: Right. This is just that one area. Any other comments? Are we ready for Step 2?

Roy Aserlind: I have several questions, but they are exactly the questions that investigation would answer, so I look forward to anything they come up with.

John Bailey: Other comments? Step 2? Okay. The proposed recommendation reads, "The US Army Corps of Engineers include in their 205 Study an investigation of widening the channel by resloping the north bank, in a stepped or terraced fashion, around cross sections 55,000 and 56,000 on the floodplain map." Task Force, any further concerns or questions? Are we comfortable with this? This recommendation reaches consensus.

Recommendation Passed by Consensus:

"The US Army Corps of Engineers include in their 205 Study an investigation of widening the channel by resloping the north bank, in a stepped or terraced fashion, around cross sections 55,000 and 56,000 on the floodplain map."

John Bailey: Anything further tonight?

Bob Wiltshire: I don't have a recommendation, but I have a comment. I will apologize to the Task Force, or say "you're welcome," but I won't be able to be here at the next meeting.

John Bailey: I have a comment about that, okay.

Bob Wiltshire: Okay, but what I would like to say is that if it looks like we're rapidly approaching the end—we know we are if we look at the calendar. One of the things I brought up at the last meeting was sharing some of my concerns about the abundance of beaver in the river. I did not have an opportunity to work up a recommendation. If anybody is interested in that, and wishes to bring something to the Task Force next week, talk to me and we'll see if we can put our heads together.

John Bailey: Okay, now my concern, if you're not going to be at the next meeting, if we move into Step 3, and we finish, are you comfortable with that?

Bob Wiltshire: Life intrudes, you know? Yes, I think, for the most part, most of the members of the Task Force pretty much know my views on most things and if you guys get done, I won't be here.

John Bailey: Okay.

Bob Wiltshire: I know you're not here at the next meeting, and Andy is not here tonight, and Doug's not here, and so...

John Bailey: I know, but my concept at the next meeting, would be to open it up to any recommendations or looking at these that we have completed. Do we have a whole? Do we need to spend some time on that? When we're through with that, to ask if people are comfortable to move to Step 3. We can't go to Step 3 until the Task Force is comfortable to go there; and then to do that. If most of you think it might take only one meeting, we can have a meeting, not meet next week and have a meeting in three weeks. We can meet next week and still have another meeting two weeks later. I don't know how you feel, so make your thoughts heard here.

Bob Wiltshire: John, if it changes your thinking at all, we had a subcommittee meeting on the Governor's Conference and we do feel that at some point there are some issues that we need to bring to the whole group for some discussion.

John Bailey: How soon though?

Bob Wiltshire: Soon, real soon. We've been working all along...

John Bailey: Two weeks, or one week, or three weeks?

Bob Wiltshire: Yes.

John Bailey: Which?

Bob Wiltshire: I'm not here next week, and if Roy is confident to carry the ball, and he certainly is up-to-date on what's going on, I think next week it could be discussed, or certainly in three weeks.

John Bailey: What is the wish of the Task Force?

Bob Wiltshire: It's not going to be a whole night of discussion, but we will need a half an hour or something to talk about this.

John Bailey: We can meet next week, and then again in three weeks, schedule that. Or we can meet in three weeks. If you want to meet next week because it is clear in your mind, or if you want to wait for three weeks to clear your mind out, so you can remember all of this, whichever.

Ed Schilling: If Roy feels confident he can handle it, let's have one next week and get it over with.

Roy Aserlind: As I sit here, I perceive the questions, anything that would come up, would be somewhat procedural, somewhat structural. I see nothing massive from our original discussions of it. Would this be what you would say, Bob?

Bob Wiltshire: On the Conference?

Roy Aserlind: Yes.

Bob Wiltshire: No, I don't think it is going to lead to any extensive debate; famous last words.

John Bailey: So, do we as a Task Force need to give the public more notice than basically less than a week, by the time we get a notice out, that we might wrap up next week?

Ed Schilling: They know we've been meeting every week.

John Bailey: I understand. I just want the Task Force to be clear on this. I don't want someone to come yell at me and Liz that we ramrodded something through here. We may not get done next week, but I think we owe it to the public to tell them that, essentially, we may be done making recommendations, until we're into Step 3. So, if anybody wants more, they have very little time to comment.

Steve Golnar: Mr. Chairman, I'd be concerned because my Commission wants to look at the recommendations and possibly provide written comment for your Step 3 process; and are you talking about moving to Step 3 as early as next week? I think that would be pushing it for my Commission to actually get together and consider these.

John Bailey: If people don't have any more recommendations, I'll ask if you want to go to Step 3 and if the Task Force does, were in Step 3. And then there are no more new recommendations introduced. We need to hash this out, and I think the City Commission may be coming back with things.

Brant Oswald: My only comment really is just sort of echoing on what Rod was just saying. I don't see, although the idea of a week off does sound kind of nice, but I'd hate to see us move into Step 3 next week. I think if we want to leave next week open for any new recommendations, I think it would be nice to get those on the table next week. I do think actually trying to move to Step 3 and finishing next week, seems a little quick.

John Bailey: So three weeks for Step 3?

Brant Oswald: That would be my vote, yes.

John Bailey: Do we need a meeting next week?

Bob Wiltshire: Just looking at our *Steps for Formal Action*, I think it is almost implied that there has to be a meeting next week because in Step 3 it states: "Prior to finalizing it's recommendations to be forwarded to the Governor, the Task Force will accept public comment, written only, on the recommendations previously adopted in Step 2." If we adopt recommendations under Step 2, and the same night move to Step 3, we do not provide the public the opportunity to provide it's written comment on those recommendations.

John Bailey: We just heard that the City Commission will not be able to meet that by next week.

Bob Wiltshire: What I'm saying, John, is that if we wait for three weeks, and have one meeting in three weeks, and we accept new recommendations at that meeting, we have to give the public the opportunity to give us written comment before we address those in Step 3.

John Bailey: Okay, so you want a meeting next week for any further recommendations, and at the end of that we will say that at the next meeting we go to Step 3, and that's that.

Bob Wiltshire: And I would say at the end of next week's meeting, we encourage the paper to be here, or whatever we need to do to let the public know that the recommendations are made and if they want to have a say, they've got to give us a written comment.

John Bailey: Okay, so Liz, we need a meeting set for three weeks also.

Liz Galli-Noble: Okay.

John Bailey: Is everybody in agreement with that?

Liz Galli-Noble: It will be Tuesday, August 19th.

Rod Siring: This meeting next week is to include then the talk about the Conference?

John Bailey: Yes, we'll do that, and we'll also accept any more recommendations anyone has, and that will be the end of new proposed recommendations. It could be a short meeting, but we're not famous for that. Anything else? Then I thank you all and we're adjourned.

Note: See *Attachment A* for summary of recommendations that have reached consensus.

VI. Next Task Force meetings:

July 29th, 2003, Tuesday – Task Force Recommendation Deliberations
Location: Yellowstone Inn

August 5th, 2003, Tuesday – Task Force Recommendation Deliberations
Location: Yellowstone Inn

VII. The meeting was adjourned at 10:15 p.m.

Attachment A. Task Force Recommendations

July 30, 2003

Consensus was reached on the following Task Force Recommendations.

Note: These recommendations are subject to final adoption under Step #3 of the *Steps for Formal Action on Task Force Recommendations* (see footnote below for details).

1. Recommendation 5/22/03—Passed by Consensus

"Create a local Bank Stabilization Information Clearinghouse to provide information about new and existing methods of bank stabilization, including methods that complement the natural system and methods that might be appropriate for specific individual situations."

2. Recommendation 5/22/03—Passed by Consensus

"The Task Force recommends that future decisions be made only after thorough consideration has been given to the geomorphology of particular river reaches and their different inherent characteristics."

3. Recommendation 5/22/03—Passed by Consensus

"That studies be developed which would indicate what types of bank stabilization would work best to achieve particular goals within different geomorphic reaches of the upper Yellowstone River."

4. Recommendation 5/22/03—Passed by Consensus

"That the existing streamlined uniform permit application process be continued among local, state, and federal permitting agencies."

5. Recommendation 5/22/03—Passed by Consensus

"Establish financial incentives to help landowners, on a voluntary basis, to remove structures that no longer function properly or are obsolete."

6. Recommendation 6/2/03—Passed by Consensus

"Establish financial incentives to help landowners, on a voluntary basis, to modify or replace existing structures provided that such modified or replaced structures eliminate or mitigate undesirable impacts on the riparian system."

7. Recommendation 6/2/03—Passed by Consensus

"Modify or replace existing public structures that have undesirable impacts on the riparian system, provided that such modified or replaced structures eliminate or mitigate those undesirable impacts with no significant adverse effects on existing public or private entities."

8. Recommendation 6/2/03—Passed by Consensus

"Implement a solution to achieve hydraulically-balanced water surface elevations, with little or no backwater, in the channels separated by Ninth Street and Siebeck Islands."

9. Recommendation 6/2/03—Passed by Consensus

"Recommend that when the following bridges are replaced or removed, hydraulic impacts identified in the Geomorphology Study be lessened: Emigrant Bridge; Carter's Bridge; Interstate-90 Bridge; Railroad Bridge at Highway 10 East; Highway 10 East Bridge; Highway 89 Bridge near the Shields River; Railroad Bridge at Highway 89; and Springdale Bridge."

10. Recommendation 6/2/03—Passed by Consensus

"Develop solutions to remove abandoned bridge abutments and piers, and reclaim abandoned approaches."

11. Recommendation 6/2/03—Passed by Consensus

"That additional studies should be designed and conducted to document the proliferation of noxious or invasive plants along the river corridor, and to evaluate the impacts on fish, wildlife, water quality, soil and bank stability, and economic productivity."

12. Recommendation 6/11/03—Passed by Consensus

"All permitting and/or regulatory management decisions (including the SAMP) must recognize and respect:
(a) the function of the flood plain, including but not limited to: connectivity between the river channel and the flood plain; regeneration of cottonwoods and other riparian vegetation; and maintenance of side channel habitat for spawning and juvenile fish; and
(b) the public and private interest in protecting private property and important social, economic and natural resources existing on or near the flood plain of the Yellowstone River."

13. Recommendation 7/08/03—Passed by Consensus

"That no additional Livingston Schools be constructed on McLeod Island."

14. Recommendation 7/08/03—Passed by Consensus

"To encourage people to study different techniques or ways to alleviate the flooding damage through the upper Yellowstone River study area."

15. Recommendation 7/08/03—Passed by Consensus

"That annual fish population surveys be conducted on all sections where they have historically been made. If indications of a declining population are detected, additional studies must be implemented to identify potential causes and recommend actions that will restore populations."

16. Recommendation 7/08/03—Passed by Consensus

"That further investigations into the production and rearing of juvenile fish be conducted; particularly to determine the relative importance of lateral side channels, mainstem habitats, overflow habitats, and spring creeks."

17. Recommendation 7/08/03—Passed by Consensus

"Encourage the US Geological Survey-Helena and the US Geological Survey-Biological Resources Division to monitor and measure the effects of instream structures on the river over time."

18. Recommendation 7/15/03—Passed by Consensus

"Propose a Park County Bond Issue to protect and preserve agricultural lands, scenic views, socially desirable riverscapes, and important riparian habitats along the Yellowstone River; and establish a representative Citizens' Advisory Council to develop criteria, to recommend expenditures, and to facilitate approval of projects funded by public monies."

19. Recommendation 7/15/03—Passed by Consensus

"Establish a fund, with the State of Montana, to match on a dollar for dollar basis, all projects that have been funded by the Citizens' Advisory Council pursuant to a Park County Bond Issue to protect and preserve agricultural lands, scenic views, socially desirable riverscapes, and important riparian habitats along the Yellowstone River."

20. Recommendation 7/22/03—Passed by Consensus

"That the Natural Resource Information System (NRIS) houses all Task Force Geographic Information System (GIS) information."

21. Recommendation 7/22/03—Passed by Consensus

"To continue policies that allow removal of large woody debris on a localized basis to protect public and private infrastructure, to assure public safety, and to allow side channel function when necessary."

22. Recommendation 7/22/03—Passed by Consensus

"Continue necessary dredging of sedimentation to maintain irrigation structures and canals."

23. Recommendation 7/22/03—Passed by Consensus

"All new and refurbished bridges should be designed to mitigate upstream and downstream negative impacts of sedimentation and gravel deposition."

24. Recommendation 7/22/03—Passed by Consensus

"That a study be conducted to understand the river dynamics and hydrology related to sloughing of river banks at Deep Creek, the Weeping Wall, and Mallard's Rest."

25. Recommendation 7/22/03—Passed by Consensus

"Fund an immediate study of the social carrying capacity of the Yellowstone River, to be conducted by researchers within the state university system with the cooperation of the Department of Fish, Wildlife and Parks and other state and federal agencies to quantify the current conflicts and potential future conflicts among recreational users and property owners, and impacts to fish and wildlife."

26. Recommendation 7/29/03—Passed by Consensus

"Encourage the maintenance of a long-term database of macroinvertebrate populations to monitor water quality in the Yellowstone River."

27. Recommendation 7/29/03—Passed by Consensus

"State, Federal, and private sources be developed to increase the funding available for conservation easements on lands in close proximity to the upper Yellowstone River."

28. Recommendation 7/29/03—Passed by Consensus

"That the drilling site known as Hobbs Well be thoroughly investigated to determine what, if any, impacts it has created, or may create, on subterranean and surface water flows."

29. Recommendation 7/29/03—Passed by Consensus

"That Montana State University serve as the lead organization to coordinate efforts by the scientific community and agency personnel to develop and implement a long-term research and monitoring program in the Upper Yellowstone River Study Area."

30. Recommendation 7/29/03—Passed by Consensus

"That the Department of Fish, Wildlife, and Parks develop a 'closure' matrix specifically designed for the Upper Yellowstone River and its own unique characteristics. This matrix is to be used in the event of any future severe conditions which may necessitate considerations of protection for its fisheries and fish habitat."

31. Recommendation 7/29/03—Passed by Consensus

"A stakeholder group be developed to continue to monitor the status of the upper Yellowstone River, to make recommendations about river related issues, to encourage long-term monitoring of river related projects, to promote the completion of identified research needs, and to examine the implementation of the Task Force recommendations."

32. Recommendation 7/29/03—Passed by Consensus

"The U.S. Army Corps of Engineers include in their 205 Study an investigation of widening the channel by resloping the north bank, in a stepped or terraced fashion, around cross sections #55,000 and #56,000 on the floodplain map."

Step #3. Adoption of Final Set of Recommendations

- a. Prior to finalizing its recommendations to be forwarded to the Governor, the Task Force will accept public comment (written only) on the recommendations previously adopted in Step 2.
- b. At its last meetings during which the Task Force finalizes the complete set of recommendations to be forwarded to the Governor, Task Force Members may not propose new recommendations but may propose modifications, amendments, or deletion of any of the previously adopted recommendations in Step 2 for any reason, including but not limited to:
 - i. To address concerns expressed by a Task Force Member's constituency or the public about the original recommendation;
 - ii. To eliminate potential conflicts between recommendations;
 - iii. To delete redundant or duplicative recommendations;
 - iv. To integrate scientific studies and data more efficiently into the recommendations; or
 - v. To correct clerical, typographic, transcription, grammatical, or rhetorical errors.
- c. The Task Force will adopt for transmittal to the Governor a complete set of recommendations based on the individual recommendations adopted by consensus pursuant to Step 2 above, as such recommendation may be modified, amended, or deleted by consensus pursuant to Step 3b above.
- d. The final set of recommendations must be approved by the Task Force for transmittal to the Governor by consensus.