Chandler Peter

CHANDLER: (Slide 1) Thanks, Tom. Thank you for the opportunity to present and meet with you folks this week. At least Tom pointed out that my bio was there. I told him, I said, "Actually you should have just said "Blah-blah-blah"; that would probably cover it well enough. I'm originally from upstate New York, so sometimes when I get on a roll, I really get on a roll and start to go a little bit too fast. So I apologize for that, for those who may have to transcribe what I'm saying, if you're going to be putting that into actual words.

(Slide 2) I have to first make the statement, and give the disclaimer, that what I'm about to say cannot be held accountable against the Corps of Engineers but actually should be held accountable against myself. I've been in the Regulatory Program for over 25 years, and there are some things that I definitely have an assertive, or as Tom put it, an aggressive disposition on relative to what we can or cannot do under our program or what we should be doing or not be doing. And there's always lots of lively debate within the Corps Regulatory Program relative to what we should be doing, what we could be doing, and what we're not doing.

I do need to note that if you're not familiar with the U. S. Army Corps of Engineers, the Regulatory Program is a very small piece of the Corps. A couple of the previous presenters identified the Corps of Engineers in various ways, and that's really dealing with what's known as the civil work side of the house. They deal with major studies that are focused in constructing things such as navigation systems, flood risk management systems, ecosystem restoration efforts, and are the ones that really focus on the actions relative to the little red castle down there in the lower corner (of the slide) that talks about "building strong."

In the Regulatory Program, we are by regulation neither a proponent nor opponent of any proposal that comes in before us for a permit, so generally our disposition is we don't have a stake in it and we don't have a disposition

whether we should be pushing one way or the other, and that's going to have a lot of influence upon some of the points I'm going to be making this morning.

(Slide 3)We do have specific authorities that the Congress has given us relative to the Regulatory Program. We regulate targeted activities under Section 9 and 10 of the Rivers and Harbors Act of 1899, we're one of the oldest regulatory programs in the country, and are focused really on navigation. We've been doing permits since the late 1800's. Relative to Section 404 of the Clean Water Act, that's only one aspect of the overall Clean Water Act, which zeros in on the discharge of dredged and/or fill material into the waters of the United States.

And then we have another statutory authority of Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972. And, yes, I have to read that slide because I have never evaluated a project associated with offshore disposal of material, which is what that covers. But we also have some goals that are identified on the slide, and in looking at and talking about today's focus about uncertainly, even with our goals, there's lots of uncertainly.

When I was preparing the presentation, I looked at our goals and said, "Well, how do I go about defining *protect*?" because everybody has a different interpretation and different standard of what protection might mean, as well as what means fair and reasonable. Depending on whether you are with a state or federal agency, whether you're the regulated water provider or public or other entity, or whether you're a non-governmental organization or the general public, everybody has their own view of what should be fair and reasonable.

I love that slide that Dr. Gunderson had up there with the individual standing there with his hand up by his head with all those arrows going in different directions. In the Regulatory Program, the arrows actually are pointing in towards us and lots of pressures being pushed and lots of stress at times relative to how we go about doing our process that we end up having to bear.

Now again being from New York, I'm tough-skinned and we tend to take a lot of abuse within the Regulatory Program. That's okay. We also burn people out, we chew them up, spit them out, and new people come in; bright-eyed

bushy-tailed and ready to go and we always wonder, "How long are they going to last?"

The last point about the goals is relative to efficient decision making is how quick is efficient? The majority of the actions that we deal with in the Regulatory Program that are really mostly germane to the instream flow council's and the members of the council are really the water supply actions that we end up dealing with.

(Slide 4) And I want to be able to point out that within the context of the Regulatory Program we do a lot of decisions across the country. There are approximately 1600 employees within the Regulatory Program scattered out over more than 35 districts across the country, and we do a large number of decisions. Our program is set up and structured in different ways, I'm not going to bore you with the details of that, but we have variety from very small actions to very large and complex actions. And I note there that the number of projects impacting water flow can be very small.

So while we, as project managers in the Regulatory Program, are operating on a day to day basis - which is driven a lot by process rather than analysis -we sometimes fall into a regulatory rut. We get into a mindset of trying to make sure that we are meeting the process. Our budgets are predicated by performance metrics. There are certain things that we have to deal with. With the ever-changing ebb and flow of tide of the Regulatory process right now, most of you probably know that we aren't really sure what waters of the United States are anymore. We used to know what it was but it's in a major state of flux, and that has some major implications relative to how we operate within our program.

(Slide 5) Our decision making does involve case-by-case evaluations and there's a lot of balancing that goes on within our decision making process. While the environment and the aquatic ecosystem is definitely a major component, it's not the only component, and we end up having to try to figure out, "What is the issue or issues that have the highest weight relative to our

decision making process?" There are certain aspects within the regulations known as the 404b(1) guidelines, which are very focused upon the aquatic ecosystem, but then we have other aspects of the program that we have to deal with relative to the National Environmental Policy Act, as well as our Public Interest Review.

(Slide 6) I do note that while a lot of our actions are smaller, we do have larger actions and that the way the program is structured is we can adjust the rigorousness of the analysis predicated upon those impacts, as well as other influencing factors upon the project we may be looking at.

But I also want to note that a lot of things that I've seen and learned over the years, I've been doing regulatory work for almost 30 years, is that in the Regulatory Program, we do not normally focus on watershed or system level types of analysis. We can, but they tend to be very unique, and when we get towards the tail end of the presentation, there's going to be some opportunities to identify where people might be able to engage or where such types of processes might be able to be implemented for types of strategies to deal with those topics that are near and dear to our hearts about instream flows.

Now the way the program process is designed is really predicated upon input, and that is, to help guide us as to which way we're going to go about evaluating certain things. We have certain criteria, whether small permits are going to be applicable, whether larger permits are going to be required. And on the larger projects that we end up dealing with, we have a scoping process. Dudley was talking about how scoping was so important up there in Alaska on that river project for that FERC license. The same thing is true in the Corps Regulatory process. While we have certain requirements under our regulations, if scoping is kept narrow or if we don't get the input, then the way the Corps looks at it is that these are not issues, and if they're not issues, then the sensitivity to responding to certain things tends to be a lot lower. If there's substantial input and there's a lot of controversy or there's a lot of concern or there's a lot of substantive types of comments, then that is going to have a major influence

upon how we adjust the structure of the permit review process. Normally the way our process is set up is when people submit an application, it's pretty limited. I have given you the citation out of our regulations, if you look at there at what it says, we issue public notices on a daily basis with minimum information.

If an action doesn't trigger more robust analysis, say, in the context of an environmental impact statement, there is really not a requirement that we require a lot of information out of an applicant. And some applicants say, "Well, how do I get the process going? I'm not sure what I'm supposed to be doing, but I want to get the process going so I'm going to give you the bare minimum that I need to," and we say, "Okay, let's get the process rolling." That's the way our permit process is set up. And if people do not contest what's going on, if people do not identify what those areas of concern are, maybe what methods ought to be employed, what resource issues should be looked at more in depth compared to others, then we're going to generally do our standard permit review type of process.

Now I'm not suggesting that every action that involves something that involves potential modifications to flow generates a lot of controversy, they don't, but again there may be expectations on the public's part that, well, "the Corps is going to go ahead and do what it needs to do," and we do, but again the things that may be of more importance to you, or the greatest importance, we may not look at it because it wasn't identified as an issue in the context of each permit action.

And we deal with permits on a permit-by-permit basis. Just because we did something on one permit doesn't mean we're going to do the same thing on the next permit, and the same thing is going to happen relative to across the country. In certain parts of the county, the Regulatory Program has been legally challenged, issues have been driven home very succinctly relative to our process, and so some districts are more sensitive to some issues than others.

And so the program in a lot of ways is adjusted and customized relative to the part of the country that you might be in.

As I noted, the projects are various, and the analysis, the methods, the long-term requirements—and when I say long-term requirements, it's usually the mitigation and/or operations of certain facilities—is going to vary from project to project. I mean we're dealing with roads, developments, environmental restoration projects, commercial developments, high rises, the whole nine yards, and as I've noted previously a lot of the actions don't involve things that modify flows. But some actions do involve critical operational aspects that the Corps has the ability to deal with, the operations associated with the actions. Dams are one of those, and I've given you the citations both out of the Corps Regulatory Program, our regulations, as well as EPA's 404(b)(1) guidelines that zero in on operational aspects. And relative to instream flow type of issues, operations of whatever we end up authorizing are going to be the key component. I've got a particular slide to deal with that. That's going to drive the rest of whether we have a lot of analysis or limited analysis on potential effects, whether we're going to go into adaptive management or whether or not we're going to look at certain issues at all. But I do note, as I have underlined up there, that "no certainty that topics relevant to in stream flows will be addressed," that we will evaluate them where they will be considered, even though you might think, "Well, on this project it's a no-brainer. It's self-evident - the Corps will look at this." If it's not a substantial issue, we may not. We may look and give it a very cursory review, in which case then people are sitting saying, "Hey, you failed to fulfill what we believe is your responsibility to protect aquatic resources," and we're saying, "Well, there's a balance here. You've got to help us identify what it is that we need to be doing on a project-by-project basis."

(Slide 7) Other areas of potential uncertainty within the Corps Regulatory process are listed. Dudley alluded to this towards the tail-end of his presentation, and its fun for all. Everybody has opportunities for uncertainties including the applicants because they look at our process and go, "I can't figure out if I'm going to get a permit. I'm not sure what the myriad of processes are

that I'm going to have to weave through to get a permit." The Corps doesn't even know necessarily what's going to happen. We don't know what the agencies are going to say. We don't know what the NGOs are going to say. We don't know what the public is going to say. We don't know how the applicants are going to necessarily react to us and work with us or not work with us through the process.

We have lots of debates and arguments about project need. Is the need – what kind of projection do you do for need? Lots of arguments about: Are your growth projections accurate? What's going to happen in the future? Is your conservation plan appropriate? Are you conserving enough water? What about the alternatives, even though we don't know what the range of alternatives might be? We don't know what might be practicable, what might not be practicable. We don't know what the screening criteria might be.

The resource conditions and the impacts associated with that as well as important factors, and all the uncertainty that's being discussed here this week. We have to deal with it and we sit there and we struggle with it just as well and we're saying, "Hey, help us try to figure out on a project-by-project basis how to go about undertaking those analysis?"

So, one of the big things is the hydrology. Obviously you guys know the importance of hydrology. I can tell you within the regulatory process, in some cases, we don't look at the hydrology. We may look at projects and think, "You know what? The biggest issue associated with the dam is the dam itself and the inundation. How it operates may not be an issue." And so we need to be conscientious, but the public helps us to remain conscientious about what our evaluation requirements or processes are supposed to follow.

And lastly is the mitigation. We don't know what mitigation may require, we don't know how long it might succeed, we don't know if it's going to succeed. And that kind of ties back into Dr. Gunderson's presentation about adaptive management and adaptive governance. And that creates issues relative to our

program as well, relative to how long do we have to hold on, relative to a permit decision and monitor and stay on top of it as time goes on.

Well, our program is starting to see some increases in budget, increases from Congress. The number of people and the number of process requirements that are being placed upon us keep increasing as well. And so while we spend a lot of time doing stuff relative to process and bean counting relative to how many permits and how many jurisdictional determinations and trying to figure out what's a water of the US and what's a better way to assess a wetland functional assessment method, in the meantime we have permits that are still coming in and there's greater and greater pressure to go ahead and to do it quicker, you know, do more with less so you can do everything with nothing. And you get to the point of sitting there saying, "Wow, I've got a big pile of work, and, bam, I get hit with a major project that has major instream flow types of implications and nobody is saying anything to me. Have I got the time to really evaluate this?" And sometimes they don't happen.

(Slide 8) So, to give you a case example, I call this Chandler's Waterloo if you will. I worked in Colorado for five years, or lived in Colorado for five years. I was up in Wyoming, and that's where I got to meet Tom (Annear), and I made the mistake of basically jumping into the Colorado water arena. There were seven water supply EIS's going on at once within the South Platte basin, and three of them were within one particular sub-basin, the Poudre River Basin. We got the city of Fort Collins, Halligan Reservoir, city of Greely, the Seaman Reservoir, and then Northern Colorado Water Conservancy District that had the Glade Reservoir. And then if you went further out over to the east, the Glade Reservoir operated in conjunction with another proposal called the Galeton Reservoir. About 250 to 300,000-acre feet of storage on a river that's already got a lot of modifications. At one time actually the folks within these two reservoirs (Halligan and Seaman expansions) were actually in this reservoir (Glade), but they decided that they didn't want to be under the potential control or authority of the entity that was implementing this, so they wanted to go and do their own thing and they were looking at maybe doing some neat things on

the North Fork of the Cache la Poudre River as well. The disdain between mainly the Glade proponent versus the Halligan expansion came out when we issued the draft Glade DEIS, which I'll get to in a minute, but it was fun times within the Poudre River basin.

Now I had all kinds of great interlacing and inter-reacting and spaghetti diagrams of all the impact analysis that we were going through and all the problems with the hydrology, because each of these entities had their own hydrologic model for the basin. And do you think they all said the same thing? No! And they all did not come in the door at the same time either. So we've got one EIS going along and then we've got these other two that kind of go together in another EIS, and when we got out to the Glade draft EIS. It took such a beating including issues relevant to all the projects that we looked and said, "Why don't we put all three of them in one EIS?"

There was enough discomfort among the applicants with that proposal that when they all got out of the plane to talk to my district commander, they wouldn't meet with him at the same time, so we had to have two separate meetings covering the same topics with two different EIS's. Our commander decided that "Well, we won't put them all in one EIS. We're going to make sure that the technical analysis is based upon a common platform." So we went back and modified the hydrology just to make sure that it all said the same thing, to make sure that the EIS's would use the same resource methodologies and that they would use the same impacts, types of impact analyses.

(Slide 9) Here's the basin, to give you an idea of what we've got. There's 20, I think, 27 or 28 points of diversion around the river, a bunch of inflows, there's eight dry-up points depending on whether it's summer, winter or fall, 303D listing for some metals and some other water quality constituents, and so basically the system is complicated, not in really good shape but it's still pretty decent in some areas. We looked at the historic and ongoing circumstances and said, "Yeah, we need to understand what the historic and ongoing impacts are." But realistically in the Regulatory Program we're not necessarily looking to fix

the sins of the past. It's not our responsibility. We'll take it in into consideration, we're looking at cumulative effects, but we're not going to necessarily look at who caused what where, but we're looking at how does this project or these projects apply on top of it.

So we're coordinating all of this stuff and got things going on the other EIS's when we get down to where the South Platte (which is down here where the Poudre dumps into i). Oh, there is that other reservoir (Galeton) that works in tandem with this one (Glade). They were basically taking ag water that was clean and replacing it with the South Platte water which has high TDS, and then the corn and the beans and other commodities were going to have probably lower crop yields so we ended up looking at effects like that.

(Slide 10) But while all that type of impact analysis was definitely interesting, it created a lot of issues, a lot of irrigation modeling types of problems that we also focused on, and it brought a lot of interesting people together (in relation to the historic, ongoing and proposed effects). We actually thought at one point, in 2004, because of the seven water supply actions that were proposed that maybe everybody wanted to play together in a collaborative type of process. I was wrong. We got them all in a room, had the Corps' Institute for Water Resources, which is one of our think tanks, come in and do a presentation about a collaborative process called Share Vision Planning, which would kind of open the EIS processes up to NGO's, the public, all the agencies, the Corps, and we would work through the process in a very open type of fashion. Everybody ran out of the room going "no freaking way" except for two of the applicants who said, "Not right now but we may come back and talk to you later about it."

So with one of the EIS's, I proceeded with the draft EIS, I sent it out, and the next thing, I've got naked people in the river holding up signs protesting the project. I got personal attacks telling me to "man up and to grow a pair" and a variety of other fun things that were going on in Colorado. And, you know, I've been doing regulatory for over 20 years, so this was definitely a learning

experience for me as to how things can actually go really sideways relative to water supply.

Actually one municipality that had one of those proposed projects up there reportedly spent $750,000, to challenge the draft EIS that we'd put out, to blast away. The comments and the criticisms that we got on it made us go back and say, "You know what? We need to do a supplementary draft EIS."

I left Colorado in March of 2013 working on that supplemental draft and it still is supposed to come out til June or July, I guess. They started the process in 2004. The other EIS's, one started in 2003, they got the final EIS out but no ROD (Record of Decision). Another EIS where another agency was the lead on it they got the final out, they signed a ROD for the Bureau of Reclamation. As for the Corps, no, because the level for detail and issues we're dealing with have still not been satisfied by the level that we need to deal with relative to what our requirements and needs are.

And so, definitely Colorado, like I say, was a learning experience for me. So I thought I'd go down to where people are calmer and mellower and more agreeable towards, you know, maybe an environmental program in the Corps, so I went to Texas.

And so now I'm working – I've gotten to meet [Kevin Mayes] this morning. I've talked with him on the phone, I got down there and talking with Tom (Annear) trying to figure out who I needed to talk to and figure out what is going on down in Texas because all the fun stuff in Colorado wasn't necessarily happening in Texas. But there was definitely lots of space and room for interaction and interrelationship between the Corps and the agencies and the NGOs relative to dealing with things that are very important or relative to instream flows and water supply types of issues.

(Slide 11) Because of all the problems that we ran into in Colorado and the experiences I gained from them – that was not the first time I dealt with water supply; I dealt with water supply starting in the late 80's in New Jersey is my first experience, worked a lot in Wyoming with Tom (Annear) on a number of

dams and water supply issues – but there are ways to potentially address these issues on a front end basis instead of before we get into the permitting realm and all the games begin.

One of those is a Special Area Management Plan with the 404(b)(1) guidelines. Our regulations allow for the development of SAMPs. Several districts have implemented SAMPs. There's actually a SAMP that was developed up on Yellowstone River relative to cumulative effects for bank stabilization. There are SAMPs down in the Los Angeles District relative to particular watersheds due to expected cumulative effects from development, but really not water supply types of actions. It may be worthwhile to try to engage the Corps relative to basin or watershed level focus analysis on the ecosystem concerns which basically agreements can be made and met relative to aspects of areas of uncertainly relative to the permit process.

As I noted, I gave you some examples of where the arenas of uncertainly are relative to an applicant as well as to the Corps and the process, but it may be portions of how to develop purpose and need. It may be that there are commonalties relative to hydrologic modeling or certain target species within targeted watersheds or things of that nature. The thing is that we don't have the money to do this, so this is really going to require a local sponsor here at the state or a watershed or a county or some other level, and the Corps can potentially work on that and we can take money under what is known as 214 agreement and try to work thought some of those things as well. We can do this but they're not very common. So this is one strategy that you ought to think about relative to frontloading the process instead of being in the middle of the permits.

Shared vision planning or similar process, I gave you a little link to that. We did a test case in the regulatory realm for the first time with those two applicants. They came back and said, "We want to try it." So we did a parallel, very constrained type of a process. There's a report that the Colorado Water Conservation Board funded and is available that laid out what was the analysis

that we went through and what are some of the trades off that we were trying to deal with relative to that process. The nature conservancy was one of the big ones that pushed that, along with one of the municipalities, when we involved the NGOs, the public, and the academics - particularly Colorado State University.

And then programmatic efforts – the CEQ just recently came out with guidance in 2014 about potentially developing these kinds of things. What I'm dealing with and working with down in Texas is the state has a state water plan process and we're looking at evaluating our process to see if there's ways that we might be able to merge up and to try to engage with the state water planning process, again to resolve potential areas of dispute and to agree on areas from a process perspective that maybe we don't have to spend as much time on, and then maybe we can focus more on doing more analysis instead of trying to deal with the process types of goodies.

(Slide 12) This is a quote that comes from the civil works side of the house. I know that Regulatory, we're the small obnoxious fire-generating group within the Corps that caused a lot of consternation, because we say "no" to things at times, but this comes as a representation of the civil works side of the house recognizing of when they're dealing with reservoirs, whether they're being built, or with the ones they've already got, that there's considerable uncertainty as to the performance of the design systems. That also works over in the Regulatory Program when we're evaluating a water supply action.

While the quote is not directly applicable to regulatory, the principal is, and so we need to be consciousness of it as well.

(Slide 13) And so when we're working through these permit processes, we need the input and the expertise and the knowledge of the agencies and the NGOs and all the resource folks to help us figure out how to go through the process in the end because one of the big things we're going to deal with, particularly relative to post-permit strategies is, once the project is up and running, who's going to watch it?

Again my workload ain't slowing down, our Corps' regulatory work is not slowing down, but if people are willing to step up and to engage and undertake certain aspects relative to long term operations, we can evaluate agreements between the applicant and agencies, and incorporate such agreements in the permit as permit conditions. State agencies are going to watch all these operational aspects? Great! If there's a dispute, call us because we have the enforcement capability under the permit but we're not able to do the day-to-day, week-to-week, month-to-month monitoring." We'd rather let that work out with those that have the responsibilities like the game and fish agencies that have the state trust responsibilities over those particular resources and the water quality folks work together, as well as the water rights folks particularly in the western states, and then we look and say, "Hey, that stuff works for us."

Number one thing: If you ever work with the 404 program or a permit, make sure that you understand what's in the operations plan and the hydrologic modeling. It's critical to everything that goes on with the permit process. (Slide 14) Here are some other examples that I was kind of harping on about agreements, and we'll call it good. (Slide 15) Thank you.