

Appendix 3

Selected quotes related to challenges

Challenge	Selected Quote
Onerous environmental review processes	<p>“The laws and regulations were designed to be doing a development not a restoration project, so I think there is some frustration there... There is a box, and the box says you are doing something bad to the environment and so you have to get this permit to do it...but...there’s not a box designed for us. We are still shoved in the ‘you are doing something bad to the environment’ box.”</p> <p>“The frustration has been it’s been difficult to get out and do stuff...Just because these are kind of green projects in restoration, they are not any easier to permit than anything else.”</p>
Conflicting regulatory priorities	<p>“So you are trying to do what you might be mandated to do, but then you are having impacts on other sensitive endangered species...And that obviously leaves the people carrying out the action...in this very grey zone about how to move that project forward...and I think it leaves a lot of the regulatory bodies kind of scratching their heads.”</p>
Making adaptive changes	<p>“Unless it truly fails I don’t see us going to the effort and expanse of getting the permits to do anything in there. And I think that’s probably true of any project.”</p> <p>“What do you do after?...like if something didn’t get connected or got clogged up or something, you can’t really take any equipment out here and re-dig anything without getting a whole set of permits again.”</p>
Acquiring real estate	<p>“This could be the best site for tidal restoration...have good elevations, we’re not going to be destroying other species’ habitat, it is isolated from other properties, you know, this is great. But you can only pay fair market value. That is the way the state works, you can’t pay a dime above. Otherwise it’s ‘gift of state funds’...but there isn’t the recognition for habitat restoration mitigation land value yet on sites in the Delta or the Marsh and...there are the opportunities that will pass us by because of that constraint.”</p> <p>“They work the land and if we try to buy it from them, they have to change what they do. So focusing on publically owned lands is important for us. But there is not enough publically owned land for us to get towards our acreage target, so that is when we start really having the real estate discussions and what land do we look at? Who is going to be a willing seller? Is this land even conducive to us? Is there enough connectivity to surrounding sloughs?”</p>
Acquiring funding	<p>“It’s relatively easy for the managers to get money to do a breach or to do a construction project. Even though that is millions of dollars in the various grants that are available for restoration, they often restrict or specifically say we will not fund studies, or they highly restrict the studies that could be funded. So that is the biggest struggle is getting funding.”</p> <p>“And obviously funding is a limiting source. So what we’re actually going to fund is going to be limited to the differences between the different sizes of marsh and the two different elevations of marsh.”</p>
Negotiating with affected landowners	<p>“There is always adjacent land owner issues and so we’re negotiating with the adjacent land owners as to the impact of how water moves on and off the site.”</p>
Gaining public support	<p>“When you are engaging with the public, you start throwing around terms like adaptive management, or BMP’s - best management practices. Those are all very ambiguous terms, that people are just going to give you the middle finger.”</p> <p>“At the beginning there were [public meetings], and they were very derisive, very difficult, very contentious... There was just a general level of anxiety about the project.”</p>
Coordinating multiple agencies	<p>“The fact is that we have almost too many different agencies to communicate with effectively. I mean I really think that unfortunately it’s just difficult. I mean, it’s difficult to keep everyone on the same page at the same time.”</p>

Coordinating science and management	<p>“The agencies are defensive by nature. They are defending their bureaucracies... they need to interpret their results through their own mission statements - make sure that their mission is being adhered to.”</p> <p>“I’m trying to walk the line between...a manager actually who is dealing with permitting and time constraints and the fact that a lot of money was already spent on this project, and trying to communicate to the scientist not to worry, that we are going to be listening to them, and I think that, if you want to say that there is a problem, sometimes it’s the scientists actually, just getting worried.”</p>
Shifting internal priorities Staff turnover	<p>“I think there has always been commitment to this project, but varying in levels of commitment...as a program manager you are always having to convince your directors that yes, we need to make sure the funding is there for this project.”</p> <p>“Staff turnover can really set back projects, then things like adaptive management strategies get dropped, monitoring metrics get missed. Stuff like our sensors going down for a year and half type of thing get overlooked.”</p> <p>“Rule change, people come and go, the staff in the agencies, or turnover of the staff in the agencies, ‘well we had an agreement with such and such agency,’ we had an agreement with some staff people who worked in the agency, but those staff people are gone and the new people don’t feel the same way as the old people did. Or they just don’t understand the project. And so they start asking for different things or new ways of doing things.”</p>
Risk aversion	<p>“People are so hung up on the policy and the contentiousness of these projects, and they are hugely contentious, that we stop acting, or we never start.”</p> <p>“They’ve got endangered species in the system and the last thing they want to do is have an action, take an action that made something worse and now they own it. It’s easier and more of human nature to not do anything and say anything.”</p> <hr/>