## 24 CFR Part 55: Floodplain Management and Wetlands Protection, 03/31/20

Marcel Tchaou: Good afternoon and welcome to our webinar today on 24 CFR Part 55, Floodplain Management and Wetlands Protection. This is Marcel Tchaou. I'm the director in the environmental plain division in the Office of Environment and Energy and we are organizing a -we are hosting this webinar in partnership with Enterprise Community Partners, Inc.

And it's my pleasure to introduce our speakers this afternoon, Liz Zepeda, but before doing that, I will pass -- Liz is a senior environmental specialist in the Environmental Plan Division and I'm sure she can -- she will give more -- she'll introduce herself more when she comes on. And I will pass now the floor to Michelle to give us some of the housekeeping items we need to know. Thank you. Michelle, you can take this up.

Michelle Grainger: Thank you, Marcel. Thank you, everyone, for joining us today for our webinar on wetlands and floodplains. All attendees will be muted on today's webinar. Please feel free to use the Q&A panel on the bottom of your screen to ask questions.

For best audio quality, we recommend that you listen via your phone line while using the dial-in provided. To switch from computer audio to phone audio, please follow the steps below where you click the audio settings and then you can switch to phone audio. Thank you so much. Liz, you may begin.

Liz Zepeda: All right. Thank you, Michelle. My name is Liz Zepeda. I'm a senior environmental specialist in HUD's Office of Environment and Energy. I'm in the Environmental Planning Division. I've been with the Office of Environment and Energy for about 10 years now and focusing on floodplains and wetlands for about the last 4 years of that.

So this webinar is a long time coming. In this webinar, I'm going to go through the basics of Part 55, which is HUD's regulation on floodplains and wetlands. This is going to be a general training aimed at everyone involved in the environmental review process either by HUD under Part 50 or by responsible entities under Part 58.

We do have a second webinar that's scheduled for May 12th that will be covering similar content but targeted specifically at FHA programs. So that will be similar but tailored more towards HUD staff, lenders and third-party providers working with those programs. So you may want to stay tuned for that one if that applies to you.

This is also my first time doing one of these webinars from home in our new telework life. So there may be some guest appearances from my dog maybe. Hopefully that will be fun and not very annoying. So this is our agenda. Floodplains/wetlands are complicated, so is Part 55.

I'm going to try to break it down as much as possible, but it is going to be a lot of information.

I'm going to start with a quick big-picture overview of Part 55, then we'll turn just to floodplains for a while going through floodplain terminology, the requirements in Part 55 and how to actually find floodplains on a map, then we'll go to wetlands and the terminology requirements and mapping tools there, then we'll combine the two first looking at how to apply your maps and determine next-steps and then how to actually conduct the 8-step process.

Now, I'm going to talk about doing the eight-step process a whole lot before I actually tell you what it is and how to do it but we will get there eventually, it's just going to be the very last thing we do. Finally, there is going to be a quick wrap-up. This session is going to be a little bit unusual in that we won't have time for questions.

It's partly for time and partly because questions about floodplains and wetlands can turn quite a bit on very small details. I don't like to attempt to answer questions about projects unless I have a map and a project description. So if you have questions about a specific project, the best first step is to talk to your regional environmental officer or field environmental officer and work with them.

We will be collecting questions through the Q&A pod throughout the webinar and I will respond to them in writing following the webinar. So those answers will be posted along with the recording and the PowerPoint in the very near future. So 24 CFR Part 55 implements Executive Orders 11988 on floodplain management and as of 2013, Executive Order 11990 on wetlands protection as well.

We always covered floodplains and we got this update a few years ago to add in wetlands following basically the same structure. Executive Order 11988 was passed in 1977. It requires all federal agencies to act to reduce the risk of flood loss to minimize the impacts of floods on human safety, health and welfare and to restore and preserve the natural and beneficial value served by floodplains.

Executive Order 11990 is very similar but applies to wetlands instead of floodplains. So these are just the HUD rules that we'll be discussing today. HUD projects also have to comply with state and local floodplain ordinances and wetlands protection rules which will often be more strict and have more requirements than the HUD rules, but today we're just going to be focusing on the HUD-specific requirements.

The purpose of Part 55 is to avoid both developing and residing in floodplains or developing in wetlands unless there are no practicable alternatives.

So constructing a house in a floodplain creates -- sorry about that -- creates two distinct problems. Obviously, you're exposing residents of the building to flood risk but you're also changing the floodplain which creates new risks by increasing impervious surfaces, you're modifying the floodplain, you can change the flow of flood waters spreading the risk to -- of flooding to a greater area or just a different area and prolonging flooding when it occurs.

So you're not just affecting those in the floodplain in the project area but also the larger community. Wetlands are a little bit simpler. They don't rise back up and hurt us once they're gone, but when wetlands are removed we lose that ecosystem. That's bad for the environment as a whole in a whole lot of ways, but one of the most critical for our purposes today is that we lose the wetlands function and floodplain management.

So -- sorry. The standard is to avoid development in floodplains or wetlands unless there are no practicable alternatives. This standard does allow us to consider financial constraints. Oh, I'm sorry, that is not the slide I meant to be on. Sorry.

We're looking for no practicable alternatives, which allows us to consider financial constraints but demonstrating that there are no practicable alternatives to building housing in a floodplain is a very high standard unless the entire community is in the floodplain, which does happen, hopefully there is an alternative.

Where there are no other options we want to make sure that all practicable mitigation measures are incorporated into our projects to minimize the risks and impacts. So practicability is not a black and white standard. It's legal to use HUD money to construct new housing in a floodplain or wetland, but we want to remember the real costs not just the upfront costs.

So on that note, let's consider the full cost of flooding. It's not just the direct losses like buildings, possessions, infrastructure, even lives, floods also create a lot of indirect expenses like relocating, finding temporary housing, lost wages and the health impacts of exposure to unsanitary conditions, mold and stress.

Floods are the natural hazard, the greatest economic and social impacts in the United States which I would hope would raise some flags for those of us working with low and moderate income people. I think it's really important to think of flooding in terms of environmental justice.

It's one thing for the very wealthy to deal with flooding if you can afford to move into a hotel and replace your stuff, take time off work, rebuild your house, relocate, then flooding can be an inconvenience, but if you're struggling to get by, even relatively minor flooding can be pretty catastrophic.

The populations we work with at HUD cannot necessarily afford to deal with those losses. Just to drive that point home, FEMA estimates that even an inch of water in a small home can cause over \$10,000 in damage to the structure and possessions and that number jumps to \$43,000 at 4 feet of flooding.

So obviously, for low-income populations, these are devastating numbers and we want to keep those in our heads. So now we're going to put wetlands aside for a little bit and turn to floodplains. We're going to start with terminology, because understanding these terms is really necessary to understanding Part 55, then our next step will be to cover how to apply those terms and comply with Part 55.

So first I'll ask what is a floodplain? We're concerned about two different types of floodplains, riverine and coastal, because the riverine are streams, rivers, anything that runs in a line and coastal floodplains will be those along the coastline. They operate differently and they have different risks and we'll get into that a little bit more later.

The good news for us at HUD and for our grantees it's not our job to figure out where floodplains are. We rely on FEMA and their Flood Insurance Rate Maps, or FIRMs for Part 55. This is a firm of a riverine floodplain. We'll spend the next few minutes working on the basics of how to read this kind of map and later we'll return to this and discuss more about how to generate a flood map for yourself.

And all these definitions we're about to go through are defined in Part 55 in Section 55.2 which has all of our definitions. So we'll start with the basic 100-year floodplain. It's more useful to think of this as the 1 percent annual chance flood. You know, these aren't necessarily going to flood once every 100 years, they have the same chance of flooding every year.

So just because it flooded last year doesn't mean you have 99 years to go before the next flood, of course, it still has the same chance as it did last year, maybe a higher chance and these are areas with at least a 1 percent chance of flooding at any given year, which could be a lot higher.

We're starting at at least 1 percent. So over a course of a 30-year mortgage, that translates to at least a 26 percent chance of flooding at least once during that mortgage. So looking at pretty big percentages there. FEMA maps are based on past flooding. They are not forward looking.

So they become out-of-date very quickly and I've heard it described as making policy based on the rear-view mirror. They don't account for any changes to the area since the map was last updated and they don't consider climate change. So as maps age, they become less and less accurate as the area changes.

One-hundred-year floodplains are designated on FEMA's Flood Insurance Rate Maps as Zone A or anything that starts with an A, AE, A1, A30, AO, AH and the next slide is going to show how those look on FEMA maps. We chose three different styles of maps. These are all Flood Insurance Rate Maps made by FEMA.

The newest style is on the left and the oldest is on the right. In your newer maps, the 100-year floodplain will be this kind of aqua or turquoise color and on older maps they'll be gray. In all cases, you can hopefully see that they're labeled A.

All of these happen to be AE, but you may see any of these map styles, depending on where you are and how recently FEMA has updated the maps in your area, but hopefully you're mostly seeing the ones on the left. So our next type of floodplain is the 500-year floodplain. These have at least a .2 percent chance of flooding each year which is at least a 6 percent chance of flooding over the life of a 30-year mortgage.

Again, that's only if they are working perfectly. I've heard that Houston experienced 500-year flood events in 2015, 2016 and 2017 which could be a statistical anomaly, but it also might be

time to reevaluate some of these maps. You know, just because it's only ranked as a .2 percent chance as we've seen, these risks add up very quickly.

So don't count this out. Five-hundred-year floodplains on the newest maps will appear as orange which makes them a lot easier to spot. They're generally Zone X shaded or dotted. You might also see them labeled as Zone B on very old maps.

It's a little bit tricky, because Zone X unshaded is outside of the floodplain whereas Zone X shaded is the 500-year floodplain and that represents the somewhat lower level of risk in the 500-year floodplain, but you'll see then either it's this kind of orange or Zone X dotted or this Zone X light gray depending on your map.

Next we have floodways. Floodways are the portion of the floodplain that is directly in and around a river. They're functionally part of the river during the flood. So during a flood, these areas are going to carry the flow of flood waters.

They're not just going to get the normal water damage, they're also going to get damage associated with objects potentially ramming into them and evacuations are going to be extremely dangerous because of the moving water and for that reason, we are very, very strict about HUD projects in a floodway.

On FEMA maps, floodways are very easy to spot. They're Zone AE and hatched. So on the newest maps, kind of aqua and red, then white and aqua and then gray and black, but they always have these kind of diagonal stripes highlighting their particular dangers of the floodway.

So floodways are the most dangerous part of a riverine floodplain. Next we're going to move on to the most dangerous part of a coastal floodplain, which is a coastal high hazard area. These are also known as V Zones. They appear on FIRMs as Zone V, which is a lot easier to say than coastal high hazard area, which you'll probably hear me jumble up several times over the next hour.

So in addition to flooding, these coastal areas are subject to storm-induced waves and high velocity waters. It makes these areas especially vulnerable and unstable. During a 100-year flood, FEMA anticipates waves of at least 3 feet high in the coastal high hazard area. So on this slide we've got a diagram that shows how V Zones relate to A Zones in a coastal area.

All the way to the left we've got our coastline, then just to the right of that we've got the V Zone to the coastal high hazard area where we would expect waves to be equal to or over three feet high.

Then just to the right of that we've got something called a coastal A Zone where we expect waves to be between 1 1/2 and 3 feet high during a 100-year storm and that line is demarcated by something called the Limit of Moderate Wave Action or LiMWA. So that is the line where FEMA anticipates that waves will be 1 1/2 feet high.

LiMWAs are a relatively new concept. You'll only see them on some of the more recent maps. They won't be on your older maps, but research indicates that structures within the LiMWA suffer about as much damage as those in the V Zone, however, our regulations treat the coastal A Zone as any A Zone.

So even though a structure in the coastal A Zone is expected to suffer much more damage than one that's further inland experiencing lower waves would Part 55 doesn't acknowledge that distinction. So if you are considering a site in this area, I'd encourage you to take that very seriously and if possible, treat that coastal A Zone the same as the V Zone to make sure that your structures there are safe as any.

V Zones tend to be a little difficult to find on maps. It can be a little tricky to differentiate between an A Zone and a V Zone to make sure you're looking very carefully at these coastal areas. I'm not sure why V Zones are the same color as A Zones, I find that a little frustrating, but you will see white lines that separate the V Zone from the A Zone.

So on this map it's here following this coast and like that. So there will be a line that shows you where the V Zone and the A Zone are separate. The LiMWA appears as one of these lines with periodic triangles on it and the triangles will be pointing towards the coastal A Zone.

So inside of this line over here we would expect waves over 1.5 feet, over here less than a foot and a half. Oh, okay. One more type of flooding I'd like to just quickly discuss is sunny day flooding, which is also known as high tide flooding or nuisance flooding. This is flooding caused by regular events, like high tide or normal amounts of rain that repeatedly inundate roads, parking lots, buildings, infrastructure.

In many areas, a lot of cites, we see this kind of flood events occurring regularly and that can cause severe long-term impacts, like deteriorating infrastructure, saltwater damage to farmlands and constant disruptions to everyday transportation and those long-term costs can be higher than even the cost of extreme weather events that occur less often.

For example, I'm in Baltimore and in Baltimore and Annapolis flood dozens of times each year in our downtown areas just from normal rains. That's a regular part of life. So that's something that you want to be aware of. A lot -- like the LiMWA, there's nothing in Part 55 that requires you to consider sunny day flooding, but it's a good thing to keep in mind when you're considering a project a lot of these areas are mapped --

Most of these areas probably are just mapped in the 100-year floodplain. So that's a good reminder that the risk of flooding on a site labeled as the 100-year floodplain it might be 1 percent or it might be an area that floods multiple times a year. So don't underestimate those risks.

So that's it for the types of floodplains. Now we're going to define a few types of activities. First we have critical action. These are project types where even a small risk of flooding is considered too high a risk. These include facilities that produce or store explosives, flammable, toxic, water reactive or volatile materials.

That's rare for HUD but potentially an issue for a few of our programs. If these hazardous materials do get into flood waters, it can spread those materials and contaminate the entire flooded area. So you want to be extra careful to minimize the risk of that happening.

Another critical action is structures and facilities that provide essential utilities and emergency services that we need to remain available during a flood, like fire and police stations, utility lines, roadways that provide the only exit route from a flood-prone area. Similarly, these are relatively unusual for HUD, but it can come up, I'm thinking especially of CDBG disaster recovery programs or ONAP programs.

And then finally, we've got structures that contain occupants who may not be sufficiently mobile to avoid floods, like hospitals and nursing homes and we might see that with a wider range of HUD programs. Note that independent living housing for the elderly are not critical actions.

We assume those residents are more mobile. So evacuations should be more similar to regular residential properties. The biggest difference between critical actions and a typical HUD project is that we expand our area of concern to include the 500-year floodplain, we prohibit support for critical actions in coastal high hazard areas and Part 55 mandates certain mitigation measures.

We hold these types of projects to a higher standard, because the risks and costs of flooding are just that much higher here. Our next one is functionally dependent uses and in some ways these are the opposite of critical actions. These are land uses that must, by definition, be in proximity to water, like docks, marinas, bridges, dams, waterfront parks.

These are the only activities that HUD can fund in floodways and V Zones. In many cases, those are the only places they can go, however, the eighth step is still required. Still important to plan carefully, think through the alternatives and mitigation measures, mitigation options when designing functionally dependent uses to minimize risks and impacts.

For example, bridges can be both functionally dependent and a critical action if they provide the sole evacuation route. So you want to make sure you're building them nice and high so that they'll be available when they're needed the most. Our last definition is pretty technical, substantial improvement.

Improvements are substantial if the cost of repairs, rehab or reconstruction is equal to or greater than 50 percent of the market rate of the structure either prior to the improvement or before damage occurs if the structure is being restored after a flood or disaster. Improvements are also substantial if the activity results in an increase of capacity, meaning the number of dwelling units or number of people on site by more than 20 percent.

So it's pretty similar to our definition of rehab that requires an environmental assessment under Parts 50 and 58 but it is slightly differently. So you'll want to make sure you're using the right definition. If a project description does include repairs, rehab or reconstruction, it's important to refer to 55.2(b)(10) to determine if those improvements are substantial.

One way this comes up is determining whether the eight-step process is required. There will be instances where substantial improvements will make the difference between elevating or not --I'm sorry, between doing the eight-step process or the five-step process and it also determines whether projects require elevation.

Under FEMA's National Flood Insurance Program regulations, or NFIP, which all HUD projects have to comply with, projects that are substantially improved are required to elevate to at least base flood elevation. And we also have some things that are specifically designated as not a substantial improvement and therefore, they don't trigger the eight-step and they don't trigger elevation requirements.

These include any rehab done entirely to comply with health or safety codes and rehab of structures listed on the National or State Register of Historic Places. Note this is very limited. It's not any rehab that includes bringing a building up to code. It has to be strictly limited to what is needed to bring the building up to safe living conditions and it doesn't apply to structures that are eligible for but not listed on the National or State Registry.

This is important, because it means that historic structures are not required to elevate and crucial repairs intended to make a building safe can be taken efficiently. Now that we've defined our terminology we can get into what goes into complying with Part 55 and I would just like to say for Enterprise that I can no longer see the chat and I haven't been able to for a little while.

So if there's anything I need to know, if you could just speak up and let me know about it I'd appreciate it. Hopefully everything has been going smoothly. So for Part 55 requirements we're going to start with some highlights. Part 55 prohibits nearly all HUD assistance in floodways as well as new construction in coastal high hazard areas.

Then there are certain types of projects that are permitted only after completing the eight-step process and determining that there are no practicable alternatives. This includes most projects in the 100-year floodplain, critical actions in the 100-year or 500-year floodplain and functionally dependent uses in the floodway or coastal high hazard area.

And in some cases, there are provisions to skip some or all of the eight steps or Part 55 compliance altogether. Before we get into the more complex requirements, here's a relatively simple one. Under 55.21, any tenants and private parties involved in the transaction must be informed of their flood risk before the transaction is executed.

For those projects processed under Part 50, HUD is responsible for providing us notice and for those processed under Part 58, it's the responsible entity's responsibility. You'll see a lot of HUD/RE in this presentation. Just to be clear I'm going to be having that in the slides and I'll, moving forward, probably just be saying HUD or the RE.

Please keep in mind that steps like this are only HUD's responsibility for projects processed under Part 50. For those projects processed under Part 58, this will be the responsible entity's responsibility to comply for -- with Part 55. So kind of following the same outline we did in the last section we'll start with the 100-year floodplain.

HUD assistance can be used for just about any type of project in the 100-year floodplain as long as HUD or the responsible entity completes the 8-step process and finds no practicable alternatives. This rule is pretty simple, but 100-year floodplains are generally the type of floodplain we're going to spend the most time thinking about and evaluating because most HUD projects are permitted in the 100-year floodplain.

Since we can use HUD assistance in these areas, we get to spend a lot of time asking whether we should and hopefully, in most situations, we're able to find another safer alternative or a way to minimize that risk. The 500-year floodplain rules are a bit trickier.

Since the risks are somewhat lower, Part 55 does not require the 8-step process for a typical housing project in the 500-year floodplain, but critical actions must consider the 500-year as well as the 100-year to provide an additional margin of safety. We do allow new critical actions in the 500-year floodplain, but there are extra requirements in Part 55 for these activities, including some additional elevation and other mitigation requirements.

Floodways, because of the very high risk in these areas, we do not permit any housing projects in the floodway. These are the areas that are essentially part of a river during a flood with rapidly moving water. So Part 55 only permits 3 types of projects in the floodway. The first is functionally dependent uses, like bridges and dams, although, the 8-step process is still required to ensure that these projects are as safe as possible.

Next we've got floodplain function restoration activities, generally demolitioning existing structures and replacing them with greenspace that will soak up floodwaters and finally, projects that are exempt from Part 55 altogether under Section 55.12(c). We'll get to those later, but those activities are also permitted in a floodway.

Rules are pretty complex in the coastal high hazard area. HUD does not fund any critical actions or new residential construction in V Zones, but we do permit functionally dependent uses, repairs and rehab of existing structures and reconstruction of buildings that were destroyed in a disaster but only if all construction is designed to be able to withstand the special risks associated with the V Zone.

So in short, HUD assistance cannot be used to build a new building but it can be used to reconstruct those that were destroyed as long as they're built back stronger and more resilient to future flooding and wave damage. I know that was a lot and if you're new to this it might be a bit overwhelming.

This table appears in the regulation itself at Section 55.11. I found it to be a very useful quick reference on when HUD assistance is and is not permitted and what compliance steps are required. When I started in this role, I printed this out and put it over my desk and I referred to it a lot.

I recommend that if this is something you're going to be thinking about a lot. Now that we hit the basics we're going to get into how to actually apply these rules and generate a floodplain map.

As I said, we rely almost entirely on FEMA's Flood Insurance Rate Maps, or FIRMs, to determine whether projects are in the floodplain.

Other official FEMA resources include flood insurance studies, which provide more precise information than you can get from the maps and letters of map revision, which are formal corrections to the FIRM. In addition to the current effective products provided by FEMA, Part 55 also requires us to rely on best available information.

So if FEMA has provided preliminary or pending maps or advisory-based flood elevations that update the current FIRM, Part 55 requires us to rely on that map even before they are officially made final. FEMA's constantly updating these maps. As we said earlier, the maps can get outdated very quickly.

So it's important that we keep up with their most current data. It's especially likely that you'll find newer maps in areas where the current effective map is older or where there has been a recent major flood event. So it's important to keep an eye out and see if FEMA has newer information for you.

The only time when we would not rely on a preliminary pending newer data is if the newer map is less protective than the effective FIRM. Part 55 requires us to rely on whichever map has the higher standard. Information on defining best available information for purposes of floodplain maps is found in 55.2(b)(1), which is the definition of coastal high hazard area, which is not intuitive.

So if you can write that down somewhere, that is where it is. So because of all that, we need to consult both the current firm and any newer information provided by FEMA. So you'll always want to check to see if FEMA has newer maps. There are also some areas that aren't mapped by FEMA at all.

We'll usually see this in very rural or tribal lands. If you're looking at a project in an area without FEMA maps, there are a variety of other data sources that could help you to determine your flood risks, including local, state, tribal or other federal resources.

If the only FEMA resource available is a preliminary map, we'll rely on that and in some cases, if you want a very clear picture of the flood risk, it may be appropriate to hire a licensed engineer to conduct a study of the area. Where there is no FEMA map, HUD or the responsible entity has the responsibility to determine whether the project is in a floodplain based on the best available information.

This is a quick reminder of how the various categories of floodplain appear on FEMA maps.

Both the 100-year Zone A and the coastal high hazard Zone V will be kind of this aqua color, 500-year or Zone B are X shaded generally orange in a newer map, floodways will be Zone AE hatched, undetermined, those that we discussed from the last slide, is called Zone D and then we have Zone X unshaded or Zone C which are outside of the floodplain or the area of the smallest flood risk.

Of course, there isn't no risk there. We do see a lot of flooding in areas that aren't mapped as the floodplain, but the likelihood is somewhat lower there. And especially keep in mind that there can be flood risks in Zone X unshaded C and D. If FEMA's maps are older or if there have been significant changes to the area since the last map, please continue to use caution in those areas.

And in Zone D, we just have no data on that. So as far as Part 55 is concerned, these lower risk areas don't trigger compliance requirements but you should still be looking at best available information. This is FEMA's map service center. It's getting increasingly user-friendly.

So if you haven't used it in a while it is much improved. If you enter in a street address or location, it will zoom to that site with a preview of the flood risk right from the main search screen that looks something like this.

You may have to have a little patience, sometimes this preview can take some time to load, but once you've got your preview you'll mark your site, oops, my arrow is in a strange place, like this and then just print this map FIRMette button right under my arrow to generate a map that you can save or print.

That FIRMette will look like this. If you recall the old way of generating a FIRMette manually, this is way easier. All you have to do is press the flag and press the print FIRMette button, but you will still need to mark your project site yourself like this, but through this example we're looking at a block of houses on the Rockaway Peninsula.

This is our current effective map. It's dated September 5, 2007 and on this map, the entire block is outside of the floodplain, however, we can see that it's just on the edge of our coastal AE Zone and not very far from the V Zone as well and we can also see a 100-year floodplain and 500-year floodplain coming in from the north side of the peninsula as well.

So based on this map a project affecting this block would not trigger Part 55 compliance, it's completely out of the floodplain. I would hope that you would exercise increased caution as it's very close to the floodplain on both sides and this map is over 13 years old and there has been a major flood event in this -- in the area, this is New York City, since 2007.

So here, especially hopefully, it would be on your radar to check for a preliminary map. Now let's go back and go through how to check for newer maps. We'll go back to the map service center page where we were before, but this time I'll press show all products up here on the right.

When we get there, there is one pending product that's probably a letter of map revision or map amendment that affects one particularly site. We've got a lot of historic products that we don't need to worry about right now, but we've got 122 preliminary products. So we'll want to take a look there.

When we expand those preliminary products, we see all of these. This is all of New York City. So there is more to dig through here than you might usually see. It's just a lot of preliminary

products, but we'll start by checking the index, make sure -- I think I've got a flag, to find the map panel for our project site.

That's going to be generally, if not always, your first product and it will have I and D in the products' ID name. When we take a look at that index, you'll get something like this. This will be a map of the entire area and it will indicate the ID number of the preliminary map panels that are available.

We can see down in the lower right that this is dated December 5, 2013. If we zoom in on our project area down here, we can find the panel member associated with our project site. So now we'll go back to the index, find that panel member and now we can see our project site again.

It's not quite as easy to read, but we can see that on the preliminary map almost the entire peninsula, certainly this area, is now in the aqua 100-year floodplain including our entire project site which is here. So because the preliminary map is more protective than the current effective map, this project site must comply with Part 55, including completing the 8-step process even though the current effective map says it's outside the floodplain.

For our purposes of Part 55, that's not the best available information. So we'll rely on the preliminary map. One more tool I want to show you here before we move on, the flood map change viewer or the preliminary map comparison tool are other mapping resources provided by FEMA that make this a lot easier.

These aren't available in every area but where they are it's much easier than digging through those preliminary map panels yourself. Using this tool you'll mark your project site and just press this execute button to generate a report. You'll have to be very patient here, again, this can take a minute, but once it loads you'll get this really easy report that shows you the effective map on the left and the preliminary map on the right.

This also includes some -- an easy glance at some useful information, like your panel members and the dates and the base flood elevation, which is the height we'd expect floodwaters to rise during a 100-year flood event. So this reinforces what we just saw on the current effective map, our site is outside of the floodplain and on the preliminary map it's within the floodplain with a base flood elevation of 10 feet.

Let's just really quickly turn to flood insurance. The National Flood Insurance Program, or NFIP, is related to Part 55 and that is what Flood Insurance Rate Maps are designed for, but they are a distinct compliance requirement. What we're discussing today is Part 55 on the left. Hopefully this is familiar.

The NFIP implements the Flood Disaster Protection Act. It's an entirely different authority than Executive Order 11988 or Part 55 and it's managed by FEMA which delegates responsibilities to the state and local level. There's a major difference between the two when it comes to maps.

While Part 55 looks at the whole site and best available information, flood insurance is required only where a structure is located in a floodplain on the current effective map. So in our

Rockaway example, that property would not be required to maintain flood insurance because the current effective map shows the structures as being outside of the floodplain.

Of course, it would still be a very good idea -- oh, sorry -- since we know that the flood risk there is very high regardless of what the 2007 map says, but FEMA would not require it, I would urge you to get it. So once you've got your map you've got three options if the project is in a floodplain or a special flood hazard area.

First, you could reject the site and move on. In some cases, this will be the easiest option. It's always going to be your safest option. We know it isn't always a possibility. And then there are cases where this is going to be absolutely required, like if the site is a floodway or under construction in a coastal high hazard area.

Second, if you think that the map is incorrect, you could apply to FEMA for a map amendment or revision. This is a formal process where FEMA officially updates its maps. If you think that the map has an error, you need to get FEMA's agreement on that even if it's a very obvious error to you, we need FEMA to agree with you before that counts.

And third, you can continue on to comply with Part 55 and complete the 8-step process. Before we get to that, we're going to turn to wetlands. I'm going to have some tea. There are two key authorities that protect wetlands in the United States.

We've got Executive Order 11990 which HUD implements through Part 55 and there's also the Clean Water Act which protects waters of the United States and requires what are called Section 404 permits to conduct actions that would impact certain wetlands. These only protect waters of the United States which is kind of a moving target if you've been keeping up with this.

The definition has changed a lot recently, especially. It's defined by EPA and the Army Corps of Engineers. But we are going to focus on Executive Order 11990. This executive order instructs federal agencies to avoid destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands unless there's no practicable alternative.

Again, this structure is very similar to Executive Order 11988 on floodplain management and Part 55 implements both of these. It also requires us to take affirmative action to preserve and enhance wetlands and we ensure that HUD projects comply with that executive order by requiring the eight steps for new construction that would impact a wetland.

Wetlands are nice, we only have two terms we need to define in this section. The first is new construction. For purposes of Part 55, we define new construction very broadly to include draining, dredging, channeling, filling, diking and pounding, anything related to that and certainly, construction of any structures or facilities.

Basically, anything that could destroy or modify a wetland counts as new construction. Part 55 also has its own definition of wetlands. For our purposes, these are areas that are inundated with water frequently enough to support vegetative or aquatic life that requires saturated or seasonally saturated soil conditions.

These can include swamps, marshes and bogs as well as wet meadows, river overflows, mud flats and natural ponds. Importantly, this includes both jurisdictional wetlands that are subject to Section 404 of the Clean Water Act and isolated non-jurisdictional and constructed wetlands.

Just because something doesn't meet the definition of a water of the United States in the Clean Water Act does not mean it's not a wetland for our purposes in Part 55, however, our definition does not include artificial retention or detention ponds unless they have the qualities of a wetland described here.

There's a great deal of variety within wetlands. They could be wet year-round or they may be seasonally dry, they're often found with floodplains but not necessarily always, but regardless of their differences, they're highly productive and important ecosystems.

In addition to providing habitat for a variety of plant and animal species that require wetlands conditions, by absorbing and filtering water, they manage a critical role in promoting water quality, erosion control and floodplain management. The requirements are simpler here than they are for floodplains.

If your project will impact a wetland, you'll have to complete the eight-step process. Fish and Wildlife Service is a useful resource that may be able to provide some additional information, again, reiterating that the Clean Water Act is an entirely separate requirement. So you'll also need to separately determine if the project requires a 404 permit from the Army Corps.

New construction in a wetland can proceed only if, after the conducting the eight-step process, you determine that there are no practicable alternatives and all practicable mitigation measures have been taken to minimize the harm. So now we'll get into completing the first step of our eight-step process, mapping the wetland.

The process is different than mapping the floodplain. Here, our first step is to check the National Wetlands Inventory managed by the U.S. Fish and Wildlife Service, but it's only a preliminary screening tool. So when you go to the National Wetlands Inventory page, you'll click on the wetlands mapper on the left and you'll get to a map that looks something like this.

Your key buttons are on the upper right here, can search for a location, open up the legend and if you press print you'll get a nice PDF of your map. When you press print, you'll get something that looks like this.

Again, you want to make sure that you're marking your project site on your map so it's easy to find and this printout will automatically include a legend like this one so you can interpret the different types of floodplains -- or wetlands, I'm sorry, around the project's area.

Now, if the National Wetlands Inventory does indicate a wetland, that doesn't necessarily mean it's a wetland as defined in Part 55. There could be errors there. You may see an area that's already been paved up here as a wetland or an artificial detention pond that doesn't have any of the characteristics of a wetland on that National Wetlands Inventory.

So your first step is going to be to talk to Fish and Wildlife Service for help with interpreting the map if you do have any questions. Sometimes it can be difficult to find the right contact at Fish and Wildlife Service.

So if you need help, please reach out to your REO or FEO for help with that, your Regional or Field Environmental Officer and if they need assistance, they can come to me and I'll help find somebody who can help in your project area. There's some other useful resources in addition to Fish and Wildlife Service, including USDA's and RCS National Soil Survey, USGS Topographical Maps and state and local information.

But if you are considering proceeding with a project that will modify or destroy a wetland, you should really go to a wetlands professional to get a wetlands delineation. A professional will prepare a wetland delineation study which will give you detailed information on the nature, location and extent of the wetland to inform your project and help you avoid impacts to the extent possible.

Now that you can map floodplains and wetlands in and around your site your next step is to determine if you need to conduct the eight-step. There are several different categories of exemptions in Part 55, most of them are listed in Section 55.12. 55.12(a) lists activities that are only required to complete 5 of the 8 steps, the modified 5-step process.

55.12(b) lists activities that are not required to complete the 8-step, but they do have to comply with all other requirements in Part 55. And 55.12(c) lists activities that are exempt from Part 55 altogether. That means that these activities are permitted in the floodway and coastal high hazard area.

So if your site has -- or if you're looking at a project, sorry, the best way to check what the requirements are is to work backwards. If all of the activities in your proposed project are listed in 55.12(c), you can stop right there. If they're all listed in 55.12(b), you do need to map but you might not need to complete the 8-step and so on.

Lastly, Section 55.28 has a modified 3-step process for certain projects that impact wetlands but not floodplains. So we're going to start with 55.12(c). As I said, I recommend working backwards. These are the activities that are exempt from Part 55 altogether.

In many cases, they don't need to map the floodplain or wetland at all. I'm going to run through most of these very quickly and then we're going to spend a bit more time on the last two.

So some of these include activities that are exempt or categorically excluded not subject to the related laws and authorities under Part 50 or 58, minor updates to projects with completed environmental reviews, activities that are -- that will permanently restore and preserve floodplains and wetlands.

We usually see this in terms of a buyout program during disaster recovery. Housing vouchers, another tenant-based rental assistance, removal of architectural barriers to increase access and

certain projects involving ships and waterborne vessels. It's very, very important that we read these carefully, that you actually check the regulations and read them all the way through.

I can see HEROS data, for example, on what people select here and I know that people select that waterborne vessel exception a lot more than could possibly make any sense and I think there just is -- people get into the mindset that they start reading it and it sounds like it applies to their project and they miss that at the very end it becomes clear that it only applies to boats.

So make sure you're really reading these regulations carefully and not selecting an exception that has nothing to do with your project. I'm not going through any of these in detail, because it's very boring. This webinar would take forever and you wouldn't retain this information.

So it's always important that you pull out the regulations. If you're looking at a project that does involve boats, you don't want to just rely on your memory of this webinar and say I think there was an exception for boats, make sure you actually consult with 55.12(c) and make sure your project meets those exceptions.

So we have something called the incidental portion exception in 55.12(c)(7). This applies for only a small portion if the site contains a floodplain or wetland and that small portion does not contain any structures or improvements, the project will not have an adverse effect on any wetland and a permanent covenant is put in place to protect the floodplain or wetland from any future development.

If you're interested in applying this exception, we do have a model covenant. It's available on the HUD Exchange. So I recommend using that.

So just to give a couple quick examples, if this is our project site with the blue rectangle being the outline of the property or site and this being a house, the incidental floodplain exception might apply to this property, because our main action, this construction, is outside the floodplain, but it would not apply to, say, this site in which only a small portion of the site is in a floodway but there are structures and improvements, including a residential structure in the floodplain.

So in this case, the floodplain is not incidental. Last exception, 55.12(c), I'd like to mention, is that Part 55 doesn't apply if the site does not contain a wetland and FEMA has formally revised or amended their maps through a final or conditional letter of map amendment or revision to reflect an error or change that removes the entire site from the floodplain.

So here we see what that might look like from FEMA. It is possible to get a conditional LOMA or LOMR from FEMA based on fill. You could add fill to your property to elevate it outside of the floodplain and thus removing your property from the floodplain. I don't recommend that people do that.

It does help that one site and elevate it, however, as we discussed earlier, that does modify the floodplain and it just spreads the floodplain to a larger area than before. So it's not a preferred mitigation option, because you're just pawning off that flood risk elsewhere and of course, if the site also is a wetland, that fill would be the worst thing you could do for the wetland.

So this exception would not apply. Moving on to 55.12(b), again, these are the activities that are subject to Part 55, meaning that the prohibitions on floodways and coastal high hazard areas apply, but they're not required to complete the 8-step process.

So these include acquisition, refinance, minor repairs and disposition of existing single-family homes as well as leasing of existing structures where the entire structure is ensured through the National Flood Insurance Program. In each exception, there are some very specific standards and requirements.

So again, make sure you're reading the regulations before applying any of these exceptions. We've got 55.12(a) which lists activities that are still required to carefully consider how to mitigate damage either to or from floodplains and wetlands but they're not required to give public notice or consider alternative sites.

This generally applies to acquisition, refinance, minor repairs and disposition of multifamily housing, hospitals and nursing homes, all activities that are not substantial improvements and again, the usual caveats about reading the regulations apply, make sure you're checking them carefully.

My last exception is in 55.28, the exception for projects that impact wetlands but not floodplains. This applies if the Army Corps of Engineers has issued an individual 404 permit that applies to all effected wetlands and all terms of that permit are incorporated into the project plans.

In this case, we allow HUD or the responsible entity to jump straight to step six, because we can assume that the Army Corps has already conducted its own analysis of the project and its impacts on wetlands and designed appropriate mitigation. So it applies only where if the Corps has evaluated the specific project with an individual permit.

A general or nationwide 404 permit would not provide those same assurances, that the risks and impacts of this project has already been considered and appropriate mitigation measures have been designed. So this exception does not apply to general or nationwide permits.

And last, this is our last section, how to conduct the eight-step process. The purpose of the eightstep is to provide a thorough decision-making process to take a hard look at the site and possible alternatives. You want to identify options to minimize risks and impacts and incorporate any practicable options to preserve the natural and beneficial values of floodplains and wetlands.

There are some very clearly defined relationships and responsibilities here. The eight-step itself must be taken by HUD under Part 50 or the responsible entity under Part 58. These are the parties who are ultimately responsible for complying with Part 55 and making all decisions and that includes this decision-making process.

HUD or the RE is also responsible for monitoring projects after they are approved to ensure that any required mitigation measures are carried out. Any other party to the process such as an

applicant, grantee or consultant can and should supply HUD or the RE with any information they need to complete the eight-step.

The applicant or recipient is also responsible for publication costs and implementing any required mitigation, however, these parties cannot be in making the decisions in the eight-step process themselves, because that responsibility must be with HUD or the responsible entity.

Here's a just quick overview of the actual eight steps before we get into the details. Step 1, we've already got, determine whether the proposed action is located in a floodplain or wetland, then publish early public notice for 15 days and evaluate practicable alternatives, identify potential impacts, minimize adverse impacts and preserve beneficial values, reevaluate whether the proposed action is practicable, publish a final public notice for 7 days and implement the proposed action with mitigation measures.

So you can expect this entire process to take at least 30 days with the early -- the notices that need to go out. We already covered step one, but let's do a quick review for floodplains. Again, we're going to be relying on FEMA maps, including any preliminary, pending or advisory maps.

For wetlands, you'll start by referring to the National Wetlands Inventory, but you may need to consult other sources, including hiring a professional to conduct a wetland delineation. And in all cases, you'll need a map with the site marked. So what's next, again, to recap, if you don't have any floodplains or wetlands, you can stop here.

If an exception applies, as we discussed in the last section, you'll apply that exception. And finally, if you have floodplains and/or wetlands and no exception applies, you'll continue to step two, but if the site contains both floodplains and wetlands, you'll combine them into one eight-step.

So you should never have to complete two eight-steps for the same project. So two is to notify the public that you're considering a project with potential impacts to floodplains and/or wetlands and give them an opportunity to comment. This has to be published in a local printed news medium.

I know we're behind the times. We need a reg change to update that to allow online posting. Hopefully that's something that will bring us into the current century sometime soon, but for now it's still printed news. It also needs to be sent to known interested parties.

In this notice, you'll include the project description and location, the size and value of wetlands and floodplains affected, the contact information of the person who's ultimately responsible for approving the review, also that the public can send informed comments into HUD or the RE.

This is a lot of information that needs to go in there. We have a template for these notices, again, on the HUD Exchange. So please use that template so you're making sure that you're including all the necessary information and you don't have to go back and publish again.

If the effected community is largely non-English speaking, your notice must be available in any other key languages that the community might prefer. This comment period is 15 days long. It can be combined with other notices if you do have any other notices to publish at this point in your process.

So three is to identify and evaluate practicable alternatives to this location. You know, in some cases, there is no option for an alternative site or alternative project. In those cases, you'll focus on the no action alternative where this location is simply rejected as the site for this project.

Where there is still flexibility, for example, if you want to construct new housing but you still have some flexibility in terms of the specific location, this is where you would identify other options and evaluate their practicability. So you only want to look at options or alternatives that would meet the same needs and be practical.

If you're looking at a site for new affordable housing within a specific housing market, you don't need to compare the proposed site to properties that are unaffordable or outside the current -- the chosen jurisdiction, you should be looking at things that are equivalent and would meet the same needs.

In some cases, infrastructure projects, for example, you should also consider feasible alternatives that would meet the same project objective without modifying floodplains or wetlands. If there is just another way this same goal could be accomplished in a less impactful way, you should be comparing against that alternative.

Step four is to identify all the potential direct and indirect impacts of locating the project in a floodplain or wetland. So you want to look at this broadly in terms of impacts to lives and property as well as broader impacts on floodplains, wetlands and community at large.

Don't limit your thinking to these concentrated short-term impacts but also more dispersed and long-term impacts.

For example, if the project would encourage more development in floodplains or wetlands in the area, like a project that brings new infrastructure or transportation options to an undeveloped area, that's going to have a much larger impact than a project that won't lead to cumulative impacts on that floodplain or wetland.

Another aspect to consider is how the flood and wetland risk is affected by other aspects of your environmental review. For example, if there's a superfund site in the same floodplain as your project, a flood would greatly increase the likelihood that your project site will be contaminated by floodwaters amplifying the flood risk and the contamination risk for your project.

I'm not going to spend much time on this slide. It outlines the instructions in Section 55.20(d). This is another area where it's really critical to read the regulations. In Section 55.20, which goes through the 8-step process, there's details and suggestions on each of the 8 steps to help you along the way.

So step four is covered in 55.20(d) and it breaks down the impacts to consider and to flood impacts and wetlands impacts at this kind of granular detail. So when you conduct your eightstep, make sure you're following along 55.20 for more guidance on your analysis at each step.

Step five is to design or modify the proposed action to minimize the potential adverse impacts that you identified in step four. So you'll focus on minimizing harm, restoring the natural and beneficial values to floodplains and wetlands and preventing modifications to preserve floodplains and wetlands in their natural state.

And here, again, 55.20, provides a lot of options that you may want to consider when designing mitigation for a project.

Your options are going to depend on the type of project and your flexibility to make changes, of course, redesigning the project to avoid any construction in the floodplain or wetland is going to be ideal, but where that isn't possible changing plans to use permeable surfaces, green roofs, landscape and minimizing fill can all help mitigate harm.

You should really always make sure that appropriate stormwater management infrastructure is in place and if you can get permanent covenants or easements in place that will protect onsite floodplains/wetlands from future development, that's a great relief as well.

I'd like to spend a couple extra minutes on the last two, elevation and compensatory mitigation. Where you can't avoid construction in a floodplain elevation is a great tool, an important one, to mitigate that risk.

Part 55 does not have elevation requirements with one exception, which I'll get to in a moment, but all HUD projects must comply, as I discussed earlier, with the National Flood Insurance Program as well as state and local floodplain ordinances and those rules will require new construction and substantial improvement projects to elevate at least to base flood elevation.

For non-residential buildings, there's often the option to flood-proof. So for those buildings, you might be able to improve the buildings so that it could survive a flood without damage, without actually having to elevate the structure itself and I often hear general disbelief that you can elevate an existing building.

This is a realistic option. You know, certainly, it's going to be easier to elevate some types of structures than others, but this is something that FEMA has been requiring for a long time. There are people out there who know how to get this done and there's surprisingly cool options and technologies out there to elevate existing structures.

Even better than elevating to base flood elevation is adding freeboard. Freeboard is kind of a weird term, but it indicates an additional margin of safety above that base flood elevation. So one foot of freeboard translates to elevating a building to the base flood elevation plus one foot.

So in our Rockaway Peninsula example, the base foot elevation on the preliminary map is 10 feet. So freeboard would be elevating it to 11 feet or 12 feet. While Part 55 never requires

freeboard, some HUD programs, including CDBG disaster recovery and FHA Multifamily, do have freeboard requirements in their program rules.

So make sure you're aware of those program requirements. There are a lot of benefits to including freeboard in any project especially where -- or where elevation is already required, but any project where elevation is an option. Elevating to base foot elevation is great, but freeboard also prepares a structure for any errors or changes to the map without significantly increasing costs.

If you're already elevating a building, adding another two feet of freeboard to that elevation is a marginal additional expense and then your building is safer moving forward as well as those resulting savings add up very fast just from the flood insurance premiums alone.

Even if you get lucky and there isn't an actual flood, flood insurance premiums are really driven by elevation. And freeboard is popular, it's well understood. As of 2015, 22 states and almost 600 localities required at least 1 foot of freeboard. All in all at that time over 60 percent of the United States population lived in a state or locality with freeboard requirements.

So this is something that's out there, it's easy to apply relatively and well understood. Sorry my data is a little out of date. I imagine more have been added in the five years since that study was last updated. Just note there was one case that does require elevation in Part 55, that's for critical actions.

When you are constructing a critical action in the 100 or 500-year floodplain, 55.20(e)(3) defines certain mitigation measures that must always be incorporated into your project. That includes elevation as well as an early warning system and an evacuation and relocation plan.

Where there's no practicable alternative to modifying or destroying more than 1 acre of wetland, Part 55 recommends compensatory mitigation. That is, establishing, restoring or preserving another wetland resource to offset the impacts from your project. The best outcome is always to avoid adversely impacting a wetland at all, but this can be a good option where that damage is completely unavoidable.

There are a few different kinds of compensatory mitigation, but the difference between them is primarily about the timing, what party is actually responsible for creating or maintaining the compensatory wetland. So if this is your best choice for mitigating harm to wetlands, look into these options and figure out which one works best for your project.

Step six is where you'll look back at all the risks and impacts you identified in step four, the mitigation measures you identified in step five and the alternatives listed in step three and based on that totality of information, evaluate whether there are practicable alternatives to occupying, modifying or destroying floodplains and wetlands.

At this step, you should consider all the factors that will impact your decision, including financial cost and benefits, but keep in mind floodplains do tend to be cheap land because it's not desirable, but those long-term costs of flood insurance, mitigation and future losses will add up

and can easily count out those savings in the long-term, even short-term when we look at flood insurance or if a disaster hits.

So you want to make sure you're considering all those costs and benefits, not just the very shortterm ones. If you do determine that there are no practicable alternatives to proceeding with the project, step four -- or I'm sorry, step seven is to publish a final notice with a seven-day comment period.

In that notice, you'll inform the public about the alternatives considered, plan to mitigation measures and justify why the project must be located where it is. This notice can be combined with other notices, but it can't be combined with the FONSI notice. That's because under 55.10(a), the 8-step process must be completed before you can make a finding of no significant impact.

You need the totality of that information from your eight-step, including this last public comment, before you can determine whether the project will have significant impacts or not.

And finally, step eight is to carry out your project. In addition to completing the eight-step, HUD or the RE has the continuing responsibility to ensure that mitigation measures are actually carried out and it's important that the environmental review record include documentation of the entire process.

This is not a thought exercise that's completed in your head; it's something that has to be described in writing. The documentation of your eight-step is not just copies of the notices, there should be documentation of each step and we have a sample eight-step on the HUD Exchange that you can use for inspiration there.

Almost done. That's it, really. Before we wrap up for today, I'm going to quickly review the highlights. You want to keep in mind that the rules are distinct for each type of floodplain, the 100-year, 500-year, floodway and coastal high hazard area as well as for wetlands.

The rules are black and white in a few cases, especially in which the rules regarding floodways and coastal high hazard areas, but in most cases they're gray. You can construct housing with HUD assistance in a floodplain or wetland as long as it isn't a floodway or coastal high hazard area but only if there are no practicable alternatives and you've demonstrated that thought process.

The HUD or the RE must consider alternatives, mitigate risk and damage to the extent possible, give the public an opportunity to weigh in and determine that this is the best and only option. We've got a lot of resources on the HUD Exchange to help you comply with Part 55.

On each of these pages we've got an overview of compliance requirements for floodplains and wetlands. We've got links to the mapping resources I referenced today and model documents for the eight-step covenants and public notices. So again, I'm not going to take questions live today, but questions entered through the Q&A panel will be answered after the webinar.

Those will be posted on the HUD Exchange along with this PowerPoint and the recording of the webinar as soon as we have that all together. So we're going to give you five more minutes here to enter questions before we close out the webinar. So if you have any questions for me, please enter those in in the next five minutes.

For questions about specific projects, again, I'd strongly recommend working with your field or regional environmental officer so they can work with you to resolve your issue based on a really full understanding of the project and your site. If you don't know what regional or field environmental officer covers your project area, that information is also on the HUD Exchange on our HUD environmental staff contacts page.

This webinar is part of a larger series. Our next one will be held at the end of April. That will be a noise training for FHA partners and then on May 12th we'll have a similar training to this one we just had for FHA partners as well.

In May, we don't have an exact date yet, but sometime in May we'll have a webinar on Section 106 of the National Historic Preservation Act followed up by yet another training that will target specifically FHA partners, this one on Section 106 and historic preservation and finally, in September on the 22nd, we'll have a HEROS training for multifamily FHA partners.

So thank you so much, everyone, for joining us. Please keep calling in for these webinars where they're relevant to you. One last reminder that we'll be collecting questions just for the next few minutes. And again, thank you all for joining and you'll hear from us soon.

(END)