00:00:00.000 --> 00:00:01.700
Stephanie Nichols
Will housing and community development.

00:00:02.620 --> 00:00:11.230
Stephanie Nichols
Technical assistance and training services. Research and information products and policy formulation to enable solutions for rural communities.

00:00:14.400 --> 00:00:18.520
Stephanie Nichols
Welcome to today's webinar. Watersense labeled Homes version 2.0.

00:00:19.580 --> 00:00:28.460
Stephanie Nichols
What are sense labeled homes meet consumers demand for a whole House solution. Tilt them, save water, energy and money while maintaining a high level of performance.

00:00:29.520 --> 00:00:36.240
Stephanie Nichols
Compared to a typical home, on average, a Watersense labeled home can save a family 50,000 gallons of water a year or more.

00:00:37.530 --> 00:00:45.180
Stephanie Nichols
This webinar will provide the specifics of how Watersense labeled homes must achieve at least 30% more water efficiency than a typical new construction.

00:00:46.010 --> 00:00:54.450
Stephanie Nichols
Under the home certification system, they are verified and certified to meet EPA's mandatory checklist and achieve EPA's water efficiency criteria.

00:00:57.420 --> 00:01:00.670
Stephanie Nichols
Today's webinar is sponsored by USDA Rural Development.

00:01:03.150 --> 00:01:18.890
Stephanie Nichols
Play we're joined by Olga M Cano. Olga is an environmental engineer in the homes program at the US Environmental Protection Agency's Water Sense program. She is involved in the development and implementation of the Water Sense Home Specification and certification system.

00:01:19.600 --> 00:01:25.770
Stephanie Nichols
Through this program, the EPA aims to promote water efficient systems and practices in the residential sector.

00:01:27.200 --> 00:01:42.710
Stephanie Nichols
Prior to joining EPA into 2015, Miscano worked as an architect in the hospitality and resident residential sector for more than seven years and then went on to serve in the peace core as a water and sanitary volunteer improve as part of the Peace Corps Master International program.

00:01:43.650 --> 00:01:53.520
Stephanie Nichols
Miscano holds a BA in architecture from Florida International University and a Master of Science in Environmental engineering from Michigan Technological University.

00:01:54.250 --> 00:01:55.170
Stephanie Nichols
Welcome, Olga.

00:01:58.400 --> 00:02:28.980
Cano, Olga
Hello everyone and thank you again to the Housing Assistance Council for having us on. It's always very exciting to come on board an really talk about our shared passion which is water efficiency and the benefits that water efficiency can have. Uh specifically in the rural communities for families that could highly benefit from lower utility bills. And of course the added benefits of protecting our water resources. So thank you. Thanks again.

00:02:29.220 --> 00:02:38.780
Cano, Olga
Thank you for that introduction. It's very exciting to be here, so we'll start off with a little bit of just overview of the program.

00:02:39.170 --> 00:03:08.490
Cano, Olga
Uhm, where water sense started and sort of the different aspects of the program will also talk a little bit about the homes section of the program specifically and where we are in terms of version two. Sort of the transition that we've made from the original version to where we are today will also talk a little bit more about the role that are verifiers are playing in this new version and how they can come on board and next steps for the program.

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Cano, Olga
You are welcome to make make any questions via the chat and we'll be happy to answer them as we go along, but will also try to save some time at the end of the webinar to have additional questions or an open discussion as needed.

00:03:27.170 --> 00:03:56.950
Cano, Olga
So what are sense as a program was initiated in 2006? Water sense is a voluntary program, meaning that unlike many of the EPA programs, it's not mandatory for states or local jurisdictions to implement it. Therefore, where open to the public, it's a program that is absolutely free. We offer Technical Support in terms of the homes program, but initially the.

00:03:57.000 --> 00:04:26.790
Cano, Olga
The program was started to certify products so a plumbing products is to shower heads plumbing fixtures. I will talk a little bit more about this further along so like it says on the slide product where we started, we also have programs which is where the homes program falls under. We talk a lot about practices in terms of human behavior and how we can sort of teach people on how to better conserve water.

00:04:27.410 --> 00:04:45.980
Cano, Olga
And homes, which in our terms we look at as a building science approach and more of a whole system approach to water efficiency, because this is where we are able to join both the product's with the actual.

00:04:47.080 --> 00:04:54.820
Cano, Olga
With the actual behavior of how people are interacting with their water use on a daily basis.

00:04:57.920 --> 00:05:25.960
Cano, Olga
So little bit more about that. We focus on practices, people and products, and it's in that middle ground where we really see the benefits of water efficiency. So if we had any of these three elements separate, we really couldn't see what the the true benefits are, so it's only in US bringing all of these together that we can have a long term and a sustained water efficiency impact.

00:05:28.590 --> 00:05:50.320
Cano, Olga
Like I mentioned earlier, the program started in the labeling of actual plumbing products and so as of now we have more than 37,000. Watersense labeled products, different models and these are the types of products that are labeled, so we have laboratory faucets which you find in residential bathrooms, shower heads, tank type toilets.

00:05:51.430 --> 00:06:00.310
Cano, Olga
Commercial toilets the flushing urinals, as well as some outdoor irrigation product such as the irrigation controllers and spray sprinkler bodies.

00:06:03.030 --> 00:06:32.310
Cano, Olga
Uh, we also offer professional certification programs, and these applies specifically to our irrigation professionals, so we have variegation, system designers, an irrigation system, auditors as well as irrigation system installation and maintenance professionals. And for those of you that may be familiar with our current version, or I should, I guess I could say current anymore, but our original version, version one, bringing one of these professionals on board. It was a mandatory.

00:06:32.470 --> 00:06:37.710
Cano, Olga
Requirement of our checklist and we'll talk a little bit more about how those requirements have changed.

00:06:40.830 --> 00:07:02.620
Cano, Olga
Now the water sense labeled program. It's meant to promote water efficiency, specifically in homes. Watersons can be applied both in single rest single house residences as well as multi family in the multifamily realm, we do certify each unit individually, so we're not certifying the entire building as a whole.

00:07:03.310 --> 00:07:14.570
Cano, Olga
Uh, it's uh through the through the homes program. Specifically, we're able to communicate the value and the benefits of the water sense label products. Whereas when we have the product's there they sort of.

00:07:15.550 --> 00:07:38.140
Cano, Olga
Are independent of anything else in their in their realm, but once they're in the house, we can really understand how that how that efficiency is really impacting the water use in the home as a whole, and it provides quantifiable water savings for both the homeowners and for utilities. So seeing the behavior and the water usage within the home.

00:07:41.130 --> 00:07:57.290
Cano, Olga
The a little bit more about the homes program. It's a national new Holbrook new home program that copper comprehensively looks at the entire water use of a home. So we're looking both indoors and outdoors.

00:07:57.580 --> 00:08:27.880
Cano, Olga
Uhm, during under the new version version two, there is a requirement of at least 30% more efficiency than the typical standard construction. The each home is independently certified so that we have transparency through the entire process. It is also designed this new version we've worked hard to design the program in this certification structures that better aligns with our other sister.

00:08:27.930 --> 00:08:36.510
Cano, Olga
Certification program such as Energy Star, an indoor air bus, if it, if any of you are familiar with those. And of course it's backed by the credibility of EPA.

00:08:41.060 --> 00:08:51.080
Cano, Olga
A little bit about residential water use so we know that homes are approximately use approximately 26.6 billion gallons of water per day.

00:08:51.130 --> 00:09:21.500
Cano, Olga
Hey, uhm and this data point is pre pandemic so we know that that data point has increased or throughout this past year and a half that we've all been home. So this impact of the program can be pretty generous when we look at water usage. Most of our water uses user happens indoors. However this can fluctuate across climatic regions. Where in some regions a lot of the water use may be used outdoors instead. This infographic.

00:09:21.620 --> 00:09:38.370
Cano, Olga
That we have on this slide shows how water is usually used in a home with the highest use happening in the showers. We hope to certify at least 10% of the annual stock of residences and that sort of are very optimistic goal at this point.

00:09:41.020 --> 00:10:13.140
Cano, Olga
And so, uh, as we've as the program has developed, we've started to find more correlations with the building industry and one of the big questions is, well, why does water matter so much to the building industry? And we're finding that more and more the access to water, the availability of water in specific regions? A specific sites that are waiting to be urbanized? I really dependent on whether there is water there is access to water or how that.

00:10:13.250 --> 00:10:39.970
Cano, Olga
A new community will impact existing communities, so coming in with a project that is water efficient can all can be a great incentive for local municipalities to allow these communities to happen. We know that the cost of water is increasing. We know that many companies are now much more interested in becoming responsible stewards of the environment, so this is a great way to do this.

00:10:40.310 --> 00:10:51.230
Cano, Olga
Uhm, again, the water is an increasingly important part of the land entitlement process. And of course corporate disclosure and reporting. So as investors are looking.

00:10:51.970 --> 00:10:56.430
Cano, Olga
Come to see where they put their funds. This can also play a big role.

00:10:57.130 --> 00:11:13.180
Cano, Olga
And on the other hand, well why those water? Why does the building industry matter to us as a program? Well, we find that it is one of the best ways for us to sort of implement water efficiency from the very beginning.

00:11:14.110 --> 00:11:43.100
Cano, Olga
Of the of the homes, right lifetime, and so most of the some of the most efficient water systems are easier to be implemented and designed or included from the design phase as well as implemented throughout the construction. So things like hot water distribution could be very expensive to to happen during a renovation, whereas if homes are designed with these types of systems like.

00:11:43.240 --> 00:11:52.090
Cano, Olga
And efficient hot water distribution system in mind. It's much more cost effective than in the long run. Much more water efficient to do these things from the very beginning.

00:11:54.830 --> 00:12:19.410
Cano, Olga
Now we'll dive into the actual program the the actual version two specifically, so just for a little bit of background, the program itself, water says, was established in 2006, so it wasn't until three years later in 2009, where we implemented a homes program, which again is a holistic view. A more of a building science approach to to water efficiency.

00:12:19.760 --> 00:12:50.140
Cano, Olga
Uh, so that's where we had version one. Then we did various iterations of the program with some updates including our irrigation professionals and some of our turf requirements have changed, and so that was will be referred to as version 1.1 and also version 1.2. Then in February of 2018 we put out a notice of intent which we refer to as an NOID, and this is what we told the industry folks were thinking about.

00:12:50.190 --> 00:13:01.730
Cano, Olga
Updating our homes program that we've seen that the industry has evolved a lot in the past. I guess at that point would have been nine years, but you know, we we have been starting to see many more.

00:13:01.780 --> 00:13:32.450
Cano, Olga
Or certification programs much more interest from builders in terms of high efficiency, high performing homes, an really the the water efficiency industry in itself had made a lot of changes, and so we were trying to see what feedback we would get from the industry to better understand how the program needed to be updated. I know a lot of the challenges from the previous version with that is that is that it was very prescriptive.

00:13:32.850 --> 00:13:46.530
Cano, Olga
And it tended to be somewhat very rigid for regions that, for instance, couldn't get much of their savings outdoors, and so this new version looks at how we could.

00:13:46.580 --> 00:14:18.110
Cano, Olga
Uh, we have added more flexibility into how we could be more regionally appropriate so that folks can decide, you know, designers and builders can decide to where it makes the most sense to save the water, and then finally June of 2020. We set out a pilot program with version two or we were able to sort of test drive the new certification structure. The new checklist, the new verification protocols and site everything. Some feedback from that. And then finally in February of this year.

00:14:18.170 --> 00:14:24.820
Cano, Olga
We were able to roll out the program in full swing and have it fully available for everyone to to use.

00:14:26.280 --> 00:14:31.210
Cano, Olga
From the version 2 pilot we received a lot of feedback.

00:14:31.420 --> 00:14:40.730
Cano, Olga
Uh, even though that the program was just, it was really specific in Nevada and we had res net who was our main.

00:14:40.780 --> 00:14:50.030
Cano, Olga
In home certification organization running the pilot and they were using their water efficiency tool known as hers H2O.

00:14:50.620 --> 00:15:08.560
Cano, Olga
And so under this certification tool, I'm sorry under this water efficiency measuring tool, each house needs to score a 70 or less to be water sense certified, and the way that their scale works is that it's from zero to 100.

00:15:08.870 --> 00:15:20.060
Cano, Olga
Uh, or I guess it could be above 100, but the scale that we manage from service 100 would zero been there's no water use, the house is completely.

00:15:21.090 --> 00:15:30.980
Cano, Olga
Self sustained in terms of needing water to 100 been, you know, there's uh, the water used is that that?

00:15:31.620 --> 00:15:53.580
Cano, Olga
A threshold of not being efficient, so the 70% really falls into that 30% efficiency, which we'll talk more about it later on, so that 30% efficiency that we're looking at for the water sense certification. So 100 would be like the use of a typical construction without implementing any water efficiency systems.

00:15:56.010 --> 00:16:25.020
Cano, Olga
Just to get familiar before we jump into the technical aspects of the specification. These are some of the new stakeholders that we are engaging with under this new version, so we have the home certification organizations and so these are the organizations that essentially are overseeing the certification, and they're independent, an approved that are licensed by us. They responsible for ensuring all the quality assurance, the training that the verifiers need.

00:16:25.890 --> 00:16:29.540
Cano, Olga
At any authorization ultra station that's needed by the verifiers.

00:16:30.190 --> 00:17:04.030
Cano, Olga
Their impartial to the entire process and they provide the reporting back to us on a quarterly basis. The HCO's are also responsible for administering the what we refer to as the water sense approved certification method, which is the hearse. H2O is an example of what a water sensor proof certification method maybe. Then we have the water sense from verifiers who are akin to Raiders in the in the energy world. So these are the folks that go out to the field that make sure that everything on the checklist has been.

00:17:04.880 --> 00:17:21.180
Cano, Olga
Achieved and that will essentially certify that this 30% efficiency along with their checklist, essentially Oliver Quirements, along with the requirements of the HCO have been met. And so then the home could then achieve certification.

00:17:21.900 --> 00:17:52.340
Cano, Olga
And finally, but not least, we have our home builder partners and this stakeholder group actually has not changed in the way that we interacted with them previously. Builders have always been asked to become partners prior to certifying any of their homes. Partnership is absolutely free. There's no cost to partnership, but we do like to come into an agreement with our with our builders just to provide all the Technical Support provide. We provide marketing support.

00:17:53.020 --> 00:18:01.120
Cano, Olga
Technical Support and really to engage our builders. An feel that commitment of designing and building water efficient hopes.

00:18:04.470 --> 00:18:22.330
Cano, Olga
A little bit more new terminology that has been introduced under this version. We have what we called a PCM, which is essentially the water efficiency measuring tool that HC oh submit as part of their application. So this tool becomes a Wakeham once once it is approved.

00:18:23.090 --> 00:18:23.530
Cano, Olga
Uh.

00:18:27.150 --> 00:18:53.960
Cano, Olga
Once well, for those of you that are that are interested in knowing more about version two and all of the specifics and sort of getting into the weeds of all these, this is the list of the documentation that essentially summarizes all of the updates of our of our new version. So we have the specification which includes our checklist and are 30% efficiency requirement explanation.

00:18:54.520 --> 00:19:13.550
Cano, Olga
Then we have this certification system which explains all the changes that have been made. Uh, as to how organizations can apply and can the requisites that are needed to become an HCL for those of you who are familiar with our version one program we only had one.

00:19:13.760 --> 00:19:27.650
Cano, Olga
Uh, we didn't use the term HCL, but it was our program in administrator and that was res net under version two. We now are certification structure has become much more flexible in terms of allowing.

00:19:27.700 --> 00:19:45.670
Cano, Olga
Uh, other organizations to play the same role that resonate used to play? So right now and we will talk about this here in a few slides we have res. Net has joined as an HCO as well as home innovation. So that's also very exciting.

00:19:46.700 --> 00:20:16.910
Cano, Olga
Then we have the water sense technical evaluation process and this is the longer and the more detailed of our over documents, and this describes exactly step by step how it is that we go about evaluating the water efficiency tools. There are submitted as part of their application. So for instance, the hers H2O that was submitted by res. Net went through this evaluation process so that us as a program could certify an.

00:20:17.190 --> 00:20:42.680
Cano, Olga
Verify that their tool was indeed measuring water efficiency in a way that we could be confident that each house would be saving at least 30% of that standard water use and then finally we have the Watersense specification for home supporting statement. It was essentially documents the rationale of the program structure, structure and some of the major program elements.

00:20:44.230 --> 00:21:15.930
Cano, Olga
So what is the process to label home? Well, first we the home builder becomes a partner with a water sense and then they start working with a home verifier or HCO to understand what what is required to achieve certification. Then the water sense home verifier confirms that the home does meet water sense. Once the House has been build an that the verifier can get insight and verify all of the items on the checklist and then finally the HCL issues. The water Sense label to the home.

00:21:16.390 --> 00:21:33.760
Cano, Olga
As long as of course it's met all of the requirements, of course is a very summarized list. There is a lot of very minute details and steps that go in between between any of these three steps, but is as a global picture. This is sort of the process that we go through.

00:21:34.920 --> 00:21:39.500
Cano, Olga
So what are the technical and organizational requirements so?

00:21:40.740 --> 00:21:48.550
Cano, Olga
The House needs to meet all the mandatory checklist and it must achieve that 30% efficiency.

00:21:49.380 --> 00:22:10.650
Cano, Olga
The mandatory checklist, which I will show you here in a minute, must be completed by all homes, regardless of what program you're certifying under. So if you're going to be under rest, net or home innovations, they each have their own water efficiency models or measuring.

00:22:11.920 --> 00:22:41.040
Cano, Olga
Tools, so regardless of those, every home has to achieve has to cover all the checklist and has to achieve that 30%. It ensures that all water sense label homes contain a minimum set of the features of to meet the homeowners expectations of performance. So no matter you know where you're purchasing your home, if it's water sense certified, the homeowner can be assured that it's going to mean all of these various central requirements.

00:22:41.830 --> 00:22:56.270
Cano, Olga
Uh, the criteria for the checklist features are basic measurements of quality and performance. There universal, universally applicable to all the homes an it's easily a table in little or no incremental cost.

00:22:56.910 --> 00:23:27.250
Cano, Olga
So two categories that are reflected in the mandatory checklist are a the verification of the home is free of water leaks, so this is kind of a no brainer. We don't expect any new home to have any leaks, but it's important for us to make it part of our checklist because it would just be unacceptable for a home to be certified underwater. Sense an be leaky right. We know that leaks are major loss of water, and so this is a big point for us. And then.

00:23:27.300 --> 00:23:34.290
Cano, Olga
Two that the water sense that all the plumbing fixtures throughout the home are Watersense labeled.

00:23:36.220 --> 00:24:07.410
Cano, Olga
So here's the actual checklist. This top part of the big part is all about leaks, and so we're looking at leaks at every essentially every connection point of the House, and then we also list are the plumbing fixtures, which needs to be Watersense labeled one of the questions that we get asked often is well. Why can't we just said a efficiency rate, you know? So set a toilet at 1.8 versus calling out the water Sense label is that while there are plumbing products out there that.

00:24:08.060 --> 00:24:40.070
Cano, Olga
Achieve the same water efficiency per say. We don't know if they've been tested our our, our products are all tested for both the efficiency but also for performance. So so when we see that there are there other programs or codes that are making requirements simply on the efficiency level, we don't feel very comfortable about that because it could potentially be a product that while it achieves the efficiency, might not be performing as well or up to the standard.

00:24:40.120 --> 00:24:44.650
Cano, Olga
So we really, you know, stand behind our label. An really try to.

00:24:45.980 --> 00:25:00.370
Cano, Olga
You know back it up and say you know this is this is what the requirement is because we trust and we know due to all the lab testing that is in place etc. That Watersense labeled products are both efficient and perform well.

00:25:01.470 --> 00:25:04.470
Cano, Olga
And also we don't want our builders getting any callbacks.

00:25:05.930 --> 00:25:33.360
Cano, Olga
So what happened to the outdoors? For those of you that might be familiar with version one, you know that there was a very prescriptive left list for the indoors as well As for the outdoors. There are very. There are various requirements that need to be. Meat would be met for outdoors, however, we also received the feedback that this was one of our more challenging areas. It was meeting all of the outdoor requirements and so.

00:25:35.190 --> 00:25:43.700
Cano, Olga
Some of the feedback was that, uh, another part of the feedback was also the fact that you know throughout the country have so many different climatic.

00:25:43.840 --> 00:26:14.940
Cano, Olga
Uh, scenarios and so it's hard to really apply, just like a one. One size fits all checklist for everything. So we knew that we needed to implement additional flexibility into the outdoors. So what has happened is that we have removed the outdoors from our mandatory checklist. However, this is where at 30% efficiency play comes into play, so we know that homes, even if they meet all of our efficiency, all of our mandatory checklist items.

00:26:15.140 --> 00:26:23.900
Cano, Olga
Indoors, which are the previous slide which are all of our leaks in the plumbing features? We know that homes will not achieve a 30% efficiency.

00:26:24.060 --> 00:26:47.300
Cano, Olga
Uh, threshold just meeting these. We know that in order to achieve that, 30% people are going to have to look outdoors regardless of what region you're in. What is nice about this is that you can now then pick and choose where you want to invest the most in implementing your most efficient systems. You know if you're in a hot dry.

00:26:48.240 --> 00:27:13.540
Cano, Olga
Uh, climate, then you really need to work hard outdoors to save that water, but if you're in a cold, wet climate then it's not going to be then you don't need to implement as many water efficient systems outdoors, but you really need to look indoors so this 30% efficiency requirement is really sort of encompassing all of these you know, looking at both indoors and outdoors to achieve it.

00:27:15.920 --> 00:27:24.600
Cano, Olga
So a little bit more about the 30% water efficiency as a. Even though, like I mentioned, all the homes have to do the meet the checklist.

00:27:26.660 --> 00:27:51.910
Cano, Olga
It does not preclude or disadvantage homes in states where the codes are more efficient. So here we're talking about, you know, the California is the Denver's of the country where we know that plumbing codes are have already adopted some of these oh or higher efficiency requirements for their building codes. But even in those dates you know we did various scenarios specifically in California, we found that.

00:27:52.490 --> 00:28:24.410
Cano, Olga
When you implement the plumbing code these homes, they are more efficient than than the standard home, but they were about between 13 and 15% more efficient and so they still weren't getting to that 30%. That water sense is asking for. It also maintains the water savings compared to version one, so version one it was very prescriptive and because it was the same prescriptive checklist throughout the country, homes could fluctuate of how efficient they were. They were going so we could have homes that were.

00:28:24.630 --> 00:28:35.370
Cano, Olga
20% more efficient versus homes that were, you know, 3040% more efficient than the standard. So this you know this. This 30% also provides that scale.

00:28:36.350 --> 00:28:42.810
Cano, Olga
And it provides a balance for the indoor and the outdoor mentions that scale appropriate deployment.

00:28:46.220 --> 00:28:56.200
Cano, Olga
So how are we measuring that 30%? So we allow the HCO to develop their own method for measuring water. So like I mentioned, res net is using her C H2O.

00:28:56.590 --> 00:29:19.440
Cano, Olga
Come home innovations like we'll talk about here in a little bit. They have a prescriptive path, but they also have a performance path where they're using the WRI and so it works within the existing framework of what the HCO's already haven't set and also protects the integrity of our program and ensures that every home is achieving that 30%.

00:29:20.210 --> 00:29:47.130
Cano, Olga
And so when we review these methods, we go through the technical evaluation to make sure we basically put each of these models into a stress test and we plug in scenarios from all over the country in really extreme sort of circumstances. So a small small home and a big yard and a big large home in a small yard and see how those all behave in the in the model.

00:29:47.820 --> 00:29:55.660
Cano, Olga
And make sure that every home, regardless of its of its size, its lot size, that ratio, that they are able to achieve that 30%.

00:29:58.400 --> 00:30:28.190
Cano, Olga
So here are some of the considerations that goal into the technical evaluation. So when we're looking at indoors, we're looking at toilet shower heads, faucets both in bathroom faucets and kitchen faucets will look at the close washers, dishwashers, bathtubs, hot water distribution systems. Whether you have a research system or any other type of system, thermostatic shut off valves in the showers. Leaks, of course, again a big one and then.

00:30:28.400 --> 00:30:31.030
Cano, Olga
Some HDL's may apply other other sorts of.

00:30:31.880 --> 00:30:35.650
Cano, Olga
A system search leak detection system, so things of that.

00:30:36.710 --> 00:30:55.880
Cano, Olga
And then outdoors, we're looking at plant type irrigation, whether they're including a water sense, certified products out outdoors, whether they're implementing rogatien, scheduling technologies, an efficient irrigation designs, or if they're using one of our water sense.

00:30:55.940 --> 00:31:06.040
Cano, Olga
From a trained irrigation professionals and then her stage 20 specifically uses a method that's called the Ricky.

00:31:09.420 --> 00:31:21.500
Cano, Olga
Now looking at the HCI organizational requirements and how we were able to sort of open up these requirements so that other organizations were able to participate.

00:31:22.990 --> 00:31:47.640
Cano, Olga
We're looking at the validation that goes into that is we're looking at the HCO meets a specific organizational requirements were looking at how the organization has developed their water measuring method, so the certification method development process and we're looking at again that stress test that we are putting the the models through.

00:31:49.020 --> 00:32:09.000
Cano, Olga
And what do the HCO's do? So we look to see that they have specific protocols in place to meet all of this criteria. So independent oversight, quality assurance, verifier training and authorization, home verification protocols, impartiality and messaging and reporting.

00:32:09.930 --> 00:32:17.440
Cano, Olga
And of course, as part of the application, every HCO needs to submit documentation detailing on how they achieve all of these.

00:32:18.790 --> 00:32:20.830
Cano, Olga
So the certification method development.

00:32:21.960 --> 00:32:29.220
Cano, Olga
So the HBO has to demonstrate how the their water efficiency tool has been developed, right? So that's the PCM.

00:32:30.330 --> 00:32:35.210
Cano, Olga
So we consider whether they utilized an ANSI approved standard.

00:32:35.300 --> 00:33:05.370
Cano, Olga
Uhm, or if the HCO is a public agency, then did they follow the requirements of the jurisdiction that has authority over them? Or were they able to demonstrate the development in accordance with alternative requirements based on the ANSI essential requirements? So there's a lot of flexibility that's given here and we've appreciated this because different organizations are able to develop their models and different in different ways, and so we don't want to say that one is better over the other. But we do need to.

00:33:05.570 --> 00:33:12.390
Cano, Olga
Uh, make sure that the process that they have gone through is one that's legitimate and one that is transparent.

00:33:13.480 --> 00:33:15.010
Cano, Olga
So that you know.

00:33:15.760 --> 00:33:18.340
Cano, Olga
People can continue to trust other program.

00:33:20.000 --> 00:33:50.340
Cano, Olga
So here we'll talk a little bit more about our current HC OS, which I've already mentioned, and so we've got res net. Who has been our program administrator from from the very start, so back from 2009. But now with our added flexibility, we also have home innovation research labs which they are the folks that run the NGBS program. So for res. Net of the water efficiency tool that's being used as the hearse, H2O, their system type is a performance rating system. The score that needs to be achieved.

00:33:50.390 --> 00:33:58.770
Cano, Olga
Under that is at least a 70 or less, so anything under 70 will can become water sense certified.

00:34:00.060 --> 00:34:09.610
Cano, Olga
This uh certification system can do both new and existing single family homes, and it covers a national scope.

00:34:10.240 --> 00:34:30.430
Cano, Olga
Uh, with home innovations. Like I mentioned earlier, they've actually been approved for two path so they have a prescriptive path where you have to achieve the entire T of the of the mandatory checklist in order to receive certification. But they also have their performance path which implements the WR I tool.

00:34:31.070 --> 00:34:50.100
Cano, Olga
And so for the certification threshold under the prescriptive path, again they just have to achieve the the entire checklist. But if you're doing the performance path, then the score needs to be of 64 and lower because that's the threshold at where the house is under NGBS. Achieve that 30% efficiency.

00:34:50.550 --> 00:35:15.060
Cano, Olga
Uhm, unlike Res net home innovations is able to certify under new and existing single family and multifamily homes and their school also is national. Another reason why we list the scope here is because we have other organizations have expressed expressed interest in applying to be HCO's, but they're at a regional level and those are also.

00:35:15.760 --> 00:35:28.280
Cano, Olga
Uh, possibilities we could be able to approve HBO's that just work in a specific region or a specific state or specific climatic zone so.

00:35:29.470 --> 00:35:33.540
Cano, Olga
That's the reason why we're noting that the national scope there or the regional scope.

00:35:35.320 --> 00:35:42.300
Cano, Olga
These are just again HRC owes and some of their contacts. If anyone is interested in in reaching out and getting more information.

00:35:45.290 --> 00:35:48.830
Cano, Olga
And so one thing that I wanted to do was present.

00:35:49.820 --> 00:36:04.650
Cano, Olga
It's very different from our from version one where everyone just had the same checklist. An if you achieve the checklist then you were certified here because we are working under various organizations and they each have their own unique.

00:36:05.710 --> 00:36:18.730
Cano, Olga
Uh water efficiency measuring tool. Then it can become a little bit less linear as to how the houses can compare. So what we wanted to do is essentially present a scenario.

00:36:19.060 --> 00:36:29.150
Cano, Olga
Come with the exact same features and show how each of the how this same building would perform under the different.

00:36:30.470 --> 00:36:31.600
Cano, Olga
The different programs.

00:36:32.340 --> 00:36:48.310
Cano, Olga
Uh, so the sample home that we have here? It's a home that's in many. It's in Minneapolis, MN. It's 2400 square feet four bedroom house. It sits on a 4000 square foot lot. It has water sense label toilets.

00:36:49.510 --> 00:37:18.950
Cano, Olga
That have a 1.28 gallons per flush. Then we have, uh, the bathroom faucets at a 1.2 gallon per minute flow. The kitchen faucet, which is not water sense certified because we don't certify kitchen faucets inside of 1.5 gallon per minute flow and then their shower heads added 2.0. This House also includes efficient hot water distribution system. It has Energy Star certified dishwasher.

00:37:19.090 --> 00:37:49.340
Cano, Olga
And clothes washer and the landscape area, which has a 1600 square feet has a Watersense labeled spray body spray. Sprinkler bodies has Watersense labeled weather based irrigation controller. The system wasn't installed and commissioned by professional. Certified by the Water Sense label program. So these are all in addition to all of our mandatory requirements which this House has checked off. They have additional.

00:37:49.990 --> 00:38:21.160
Cano, Olga
Water efficient systems or practices that have given them additional points and in order to pass under all three programs so this same home passes under the home innovations prescriptive path, meaning that they achieved they they were able to complete the entire checklist. They received a V score of 69 under the rest night. Hers H2O scoring tool, and they received a number. A score of a rating index of 64 under the HR performance path.

00:38:24.700 --> 00:38:39.400
Cano, Olga
So now we wanted to jump a little bit into. Well, what can we do? You know, within the home, to to make it more water efficient to get it closer to achieving certification, and so we'll talk a little bit more about home design.

00:38:40.290 --> 00:38:50.960
Cano, Olga
Uh, many of these systems were actually prescriptive requirements. Under our version one, but there they have been proven to be water efficient.

00:38:51.030 --> 00:39:00.170
Cano, Olga
Uh, uh, I'm sorry they have been proved to be systems that indeed safe water and so we what we would like to continue promoting them.

00:39:00.780 --> 00:39:20.020
Cano, Olga
I have good practices as folks you know, continue to design and build a water efficient homes so so an ideal water sends a efficient Homer water efficient home would have fast hot water. So this means that we're looking into efficient water distribution systems.

00:39:20.250 --> 00:39:30.990
Cano, Olga
Uhm saving stop perform. So again this is going back to our water sense label products which are labeled to bull safe water and perform well.

00:39:31.690 --> 00:40:03.670
Cano, Olga
A Peace of Mind. So we also like to promote the Energy Star products in specifically dishwashers and clothes washers. In order for these products to have become energy efficient, they had to also tap into their water savings and so we trust that these. We know that these products are also saving water and outdoor ease. We never, you know, we can never turn our back on the outdoors. We know that providing appropriate landscaping and IT verification systems are installed that they are installed properly.

00:40:04.120 --> 00:40:21.120
Cano, Olga
This is what's going to get that house that 30% efficiency. So for the hot water distribution systems this is. This is a big one, and one that really has to be thought of at the design phase, because once you're in the construction phase, it's going to be very difficult to redesign.

00:40:21.300 --> 00:40:39.310
Cano, Olga
Uh, you know all of your plumbing or etc or make any any adjustments. So really we really promote for this to happen at the design phase. So the the idea for the hot water distribution system is that they reduce the waiting time for hot water to be delivered to the point of views.

00:40:40.210 --> 00:40:47.020
Cano, Olga
Which of course saves in the water. Waste it while we're all waiting for that water to change in temperature.

00:40:48.430 --> 00:41:00.490
Cano, Olga
Having a healing waters, typically the second largest use of energy within the home, and so again that taps into that. That water, you know, just not letting your pipes.

00:41:02.000 --> 00:41:25.240
Cano, Olga
Hold on to that water and then having to purge them before we see a temperature change. And So what is this? Legal poems? Minimize water loss by storing no more than half a gallon of water between the hot water source and any of the hot water fixtures. The hot water source is typically a water heater, but it can also be a demand initiated Ristic relation line.

00:41:27.280 --> 00:41:58.370
Cano, Olga
And so we do offer some design guides and technical assistance in terms of what is most appropriate for specific designs. So we have these sort of if and then scenarios where we sort of suggest what type of system would be best to to include in a in your designs so we have demand initiated research systems, trunk and branch our whole house amount of old systems. There are others, but these are some that I just put out here for an example.

00:41:58.790 --> 00:42:16.210
Cano, Olga
And then of course again, efficient outdoor design, which can be a huge, you know? Yeah, there's can represent a huge percentage of the water that's used, so it provides homeowners with attractive an water efficient landscapes that are easy to maintain. That's always key.

00:42:17.140 --> 00:42:46.210
Cano, Olga
The why well on average a single family home in the United States uses about 30% of their water outdoors. Like I mentioned earlier in some hotter and drier areas of the country, this can be as high as 70% so regionally appropriate landscape can also help homeowners cope with drought and comply with any times of local watering restrictions that they may face and how well the wakeham's. Which are the water efficient stool measuring tools?

00:42:46.410 --> 00:42:55.740
Cano, Olga
That of HBO's are using the address. This outdoor water efficiency through a combination of appropriate landscape design as well as efficient irrigation systems.

00:42:58.590 --> 00:43:28.270
Cano, Olga
And then we also wanted to talk a little bit more about verifiers. What is the role that they play under this new version? Our relationship with verifiers would like to think that it's going to grow closer before we used to, we used to have providers that really interacted with the verifiers. But now with the verifiers just working with the HCL's, we're hoping that verifiers can come to us a lot more, or count on us for much more Technical Support and sort of guidance as.

00:43:28.990 --> 00:43:32.560
Cano, Olga
As they get themselves out there promoting water efficiency.

00:43:33.140 --> 00:43:42.770
Cano, Olga
So approved verifiers that are in good standing will be referred to the water sense. The home verifiers will will be referred as Water Sense Home verifiers.

00:43:43.840 --> 00:44:02.510
Cano, Olga
Even the verifiers not partners. We are very keen into continuing to support the verifying or wedding industry. They were decimated with a new promotional mark, so this logo that you see here is available for any verifiers to sort of promote their services.

00:44:03.500 --> 00:44:25.390
Cano, Olga
They are also listed on the new on a new water sense verifier search tool. So we have developed a tool where we can load in all the active Raiders verifiers that are carrying out water, sense homes, verifications, and folks can come to our website and find you on that website to serve, connect with you through that through that manner.

00:44:25.570 --> 00:44:36.550
Cano, Olga
Uhm, ACL's are responsible for training and approving the verifiers and providing information on verifiers to EPA. So even though the HCO is essentially are managing the verifiers.

00:44:37.970 --> 00:44:41.860
Cano, Olga
And they and it's the HLS responsibility to report to us.

00:44:42.770 --> 00:45:00.800
Cano, Olga
We still provided so H each. HBO is provided with a training, a Waterson specific training that they're supposed to deliver to each verifier an so that wirsen specific training is the same across all HCO's. And then of course.

00:45:01.140 --> 00:45:25.310
Cano, Olga
HBO has a specific training that specific to their water efficiency measuring tool as to how to certify the home or how to verify the hub, and then verifiers will verify homes seeking the water sense label in accordance to the specific to this specification, which is the EPA specification and the HCO's Wakeham, which is the HBO's requirements to achieve this.

00:45:26.560 --> 00:45:27.240
Cano, Olga
30%.

00:45:29.400 --> 00:45:50.050
Cano, Olga
This is a snapshot or a screenshot of what the our new verifier tool looks like, and so it list your name, your company, where in the country you are, an which HC. Oh, you're affiliated with an verifiers? Again, can be affiliated with with one or more of our participating HBO's.

00:45:51.760 --> 00:45:54.380
Cano, Olga
And So what are the next steps for our program well?

00:45:54.710 --> 00:46:19.030
Cano, Olga
Come back in June. We had a big sort of landmark date where projects that were permitted up until June 30th of 2021 could pursue any of the versions. So version 1, version 1.2 or version two. Any of those products could be certified under either version.

00:46:19.340 --> 00:46:21.780
Cano, Olga
Uhm, after any projects.

00:46:21.900 --> 00:46:33.800
Cano, Olga
Uh, permitted after June 30th. So starting July 1st would have to under would have to participate on the water Sense Version 2 program.

00:46:34.800 --> 00:46:37.520
Cano, Olga
Uh, however, homes that were.

00:46:38.220 --> 00:46:58.840
Cano, Olga
Permitted from June 30th or before half all the way until the end of the year. So December 31st 2 receive that certification. But once we get into 2022 so January 1st, 2022, every home that seeks Watersense certification will have to be certified under version 2.

00:47:03.530 --> 00:47:30.510
Cano, Olga
Where we're going after this? Well, the program that it was a lot of work to sort of get the program up to version two and God version two out the door to receive the feedback an you know make it official. But now we've got a program to run, so now it's sort of where the real work starts, right? So we're working really \*\*\*\* \*\* getting more HCO's on board, so we have a few more organizations that are sort of in that.

00:47:30.910 --> 00:47:33.100
Cano, Olga
Application process.

00:47:34.230 --> 00:48:03.320
Cano, Olga
As we speak, so hoping to have a couple more organizations we don't foresee having you know more than I don't know. Five or six organizations participating and the HCO role. Mainly because there aren't many organizations that would meet that certification structure that is mandated to become an HCL, and also because the there are many of these organizations that work international scale.

00:48:03.520 --> 00:48:24.360
Cano, Olga
So there's already even between the two that we have a lot of or more than one option into into certification will be transitioning our existing builder partners from version one to version two, so all of the building partners that had been participating previously, or that had any projects where they were.

00:48:24.700 --> 00:48:35.850
Cano, Olga
Uh, where they were recommending version one or where they were in pursuing version one. We can help them make the transition into version two and see how you know that would fit.

00:48:36.140 --> 00:48:59.970
Cano, Olga
Uh, of course we're updating all of our training and educational materials to align with version two. A lot of the things that you will find out website right now still align with version one, and so, as you can imagine in the government, it's a very bureaucratic process and just updating a lot of these resources just takes a lot of time and approvals from the from, you know, various parties without the government.

00:49:00.020 --> 00:49:32.160
Cano, Olga
Uh, we of course continue to support water sense utility and promotional partners and basically spreading the word. We're very excited about this new version. We truly believe that it has opened the doors for many to participate. We think that that the additional flexibility, specially given the outdoors, it's huge and that it has. It removes a lot of barriers for many that were interested but maybe could not make it happen for other reasons.

00:49:32.610 --> 00:50:05.220
Cano, Olga
Uhm, so with that here is my contact information for any of you who might be familiar with the program. Jonah Schein, who's my colleague, has been with the program for a while, and he's also available to answer any questions or provide any technical assistance. But like I said, there is no cost to reaching out to us or to partnering's builders with our program as a government program, we don't collect any fees and where, essentially here to serve the public. So anything that we can.

00:50:05.420 --> 00:50:10.250
Cano, Olga
Help with please feel free to to reach out and that's it for me.

00:50:12.680 --> 00:50:20.080
Vickey Stratton
Thank you so at this point we would like to ask if anyone has any questions you can type in the chat or Ogle.

00:50:25.130 --> 00:50:47.780
Vickey Stratton
It also watch out for your watch out for the survey that should be sent out for an email This weekend as well and you can also use the raise hand feature an you can be called upon before, uh, muting your before you. We meet Martin your mic so at the cross the top you should see the raise hand feature and if you click on that you can use your mic.

00:50:53.630 --> 00:50:55.980
Vickey Stratton
So one of the questions we have is.

00:50:57.230 --> 00:51:00.220
Vickey Stratton
How do homeowners know their homes have?

00:51:01.740 --> 00:51:03.320
Vickey Stratton
Gotta water sense label.

00:51:04.380 --> 00:51:09.160
Cano, Olga
Yeah, that's it. That's a great question. Typically, if you're purchasing a new home.

00:51:09.620 --> 00:51:21.120
Cano, Olga
Uhm, the home builder or the realtor should have some sort of paperwork for you showing that the certification has been achieved.

00:51:22.280 --> 00:51:32.400
Cano, Olga
If you, if they don't find that, you can always reach out to us. We do have a record. We do keep a record of the homes that have been certified so we can. We can definitely.

00:51:33.530 --> 00:51:35.090
Cano, Olga
Verify in that way.

00:51:35.520 --> 00:51:47.310
Vickey Stratton
OK, great and then does it cost more? I'm sure it does to build a water since labeled home. So do we know com like the average or you know I know per square feet it would be different but.

00:51:47.610 --> 00:51:55.000
Cano, Olga
Yeah, yeah, that's also a great question, one that obviously you know has a great impact on the program.

00:51:55.990 --> 00:52:20.470
Cano, Olga
The short answer is I don't know the the long answer is we do find that our our product Sencha Lee which are you know same as standard there right off the shelves they are not anything fancy. You don't have to special order them. You can go to Home Depot and pick up a Watersense labeled pause it and there all price ranges and so they're they're very quivalent to standard products.

00:52:20.710 --> 00:52:49.040
Cano, Olga
Uh, in terms of design, when we when we speak about like water distribution systems, that's where we really encourage people to look at the design phase so that you can incorporate a lot of these systems early on and you don't see additional cost when you're building. But really, I mean, besides perhaps the rating 'cause there really shouldn't be like an astronomical price tag on certifying a home.

00:52:49.790 --> 00:52:53.310
Vickey Stratton
Right, I don't. I think it's kind of common that you now see a lot more.

00:52:53.360 --> 00:53:26.470
Vickey Stratton
Her appliances and and items that are water sense certified and so on. I don't like. I don't believe there's a lot of costs price difference in that in that feature as well, because it's really going to save you in your home as well and just back to the fact of the the design phase is a very important phase of building new homes because I know that we had to come up with a design that worked for the water sense feature, so I'm sure I will. A has those you know an Ave for you to figure those out as well? And will we're all here to support you.

00:52:58.340 --> 00:52:59.040
Cano, Olga
Yes.

00:53:27.010 --> 00:53:29.590
Vickey Stratton
In getting to the 2.0.

00:53:30.540 --> 00:53:31.450
Cano, Olga
Absolutely.

00:53:30.960 --> 00:53:32.420
Vickey Stratton
Certification so yes.

00:53:33.700 --> 00:53:50.070
Vickey Stratton
If you make sure that you got and uglas contact information here and then, we also have a copy of the webinar will be available as well, so thank everyone for attending today and look forward to hearing from you in the future.

00:53:50.630 --> 00:53:51.480
Vickey Stratton
Thank you welcome.

00:53:50.770 --> 00:53:53.350
Cano, Olga
Great thank you all. Bye bye.

00:53:53.160 --> 00:53:53.720
Vickey Stratton
Bye.