FEMS Office Hours-20251028_130106-Meeting Recording

October 28, 2025, 6:01PM

37m 0s

Scott Linn started transcription

Scott Linn 0:03

You know, I'm trying to get these posted on the fems portal.
We'll see if that works to get these recorded or the recordings on there, but I'm hoping that will be the answer to where everything will be going forward.
So we'll see how that moves forward with.
First off, wanted to do quick demo.
Of again very simple.
Information here. So under the fems under the reports tab, you will see there's a couple different tabs. The fire Danger weather station information and field sample.
So we have a couple of different reports in here now.
Fire Danger Summary Tab is in here and so you will be able to click on.
Today's information and you can sort by I'm gonna expand this out.
Where you can see it a little bit better, sort by your state.
So if I click off.
And we'll just do.
We can do Texas and see where they're looking at today. It will give you.
The average fire danger outputs looking at the daily values for the information and then it will average them.
You can also click on and select individual stations and it will provide for you.
The daily value. So if you want to grab your SIG information this way as well, you'd be able to look at these charts this way. So that is the the model fuel moistures.
Going through this way.
So again, these reports were starting to get the expansion of these out.
Let's see here.
You also have on the bottom.
If you want to look at your different values again, you can look out seven days.
Is if we choose our state.
Let's see here.

We'll do Arizona on this one and you can choose your different stations and it will give you your ERC's and mbis and all your fire danger outputs as well.
So these are pulling off of the daily Max values again. If you want to be able to start looking at and getting a different view of fire danger outputs.
By logging in or by at least by going through fems itself.
You can do that this way and it will provide you with again the seven day forecast.
And prior days of information as well.
So right now currently we don't have a way to save these reports.
As of yet. So.
But we are working to try and get these so that we have.
Templates that we can share out with groups or share out with individuals so that they can utilize power BI and customize the reports.
For themselves, it will be the standard report, but it would be customized to what they want.
That way it's always opening the same thing. We also have weather daily summary report that we've been working on.
Again, it would just give you your values for the day. So if you want to start looking at where you may be missing data. This is also a really good way to see that if you're missing, you know any inputs, what stations might not be showing. So again.
Really good way to kind of summarize your data.
And look at where you hate may or may not have missing information going forward on the weather table itself.
And then we do have the station information report.
Again, this is really primarily all the metadata for the stations I showed this last week and we're working on getting a station health report built up here, hopefully in the next week or two we should have that completed and that will show you really how much flag data.
Or how much quality?
Control issues you've been having with the station for the historical period of record.
So some of the reports are starting to get built up as we get some more time into these areas.
So, questions on questions on the on the the BI reports.

A **Allison, Kristen - FS, CA** 4:21

Hey, Scott, it's Kristen.
Are you thinking about maybe doing that by GAAP as well?

Scott Linn 4:27
Yeah. So those are like, yeah.

Allison, Kristen - FS, CA 4:27
So you could have a average over your GAC.

Scott Linn 4:29
So that's the kind of stuff like as you see stuff.
So what?
The other one I was actually trying to get into would be both fire danger and having these summaries so that we had it not just daily summary, but I want to be able to have it so you can filter by hour if we need it by GAC that.
Would be a really. You know if and I believe we should be able to do that.

Allison, Kristen - FS, CA 4:47
Yeah.

Scott Linn 4:49
So we can do it by GAC.

Allison, Kristen - FS, CA 4:51
And fdra.

Scott Linn 4:51
However, we want to do those types of filters. We can do all that.
So we just need to know.
Like if you have recommendations.
Please send them to me 'cause. We can easily get those built into the filters and if it's like, hey, just keep this. This report is good. We just wanna have one more filter in there or if you see that you wanna have a new a whole new report.
Would also be like. Yeah, I want this report but I want it hourly or I want this report

and I want it you know display this way with a simple chart attached to it as well.
So I don't know if we can do FDRA. Yeah, Travis.

Verdegan, Travis (DNR) 5:22
Hey, Scott.
Yeah, I was just going to speak to that.
So some some things like.
A Psas fdra.
By GAAC those are all data dependent.
So if we've got the data, we can do it, and if we don't, we're going to have to get that data available to us before we can do it.
So some of them will be easy, some of them will be a little bit more complicated.

Scott Linn 5:54
Yep, I think GAC we might be able to do.
I'm not sure if we have that in the metadata.
I think we might, Travis, that we could do the fdras and the PSA's. I don't think we have that in the middle.

Allison, Kristen - FS, CA 6:05
If you have the gaq, you'll be able to pull the PSA because the AG O.

Verdegan, Travis (DNR) 6:06
Yeah.

Allison, Kristen - FS, CA 6:11
You could at least pull it from the metadata from AGO.
Well, because they're all connected.
So if you go into the because I just, I just used it for something else and I know it's in there.
So it'll give you the four letter designator for the PSA.

Scott Linn 6:28
Yeah, I know it's available, but we're not hooked into that yet. How's that?

Verdegan, Travis (DNR) 6:32
Yep, exactly when did.

Scott Linn 6:34
And we have to use what metadata we have currently right now for these.

Allison, Kristen - FS, CA 6:40
Do you have this?

Scott Linn 6:40
So.

Allison, Kristen - FS, CA 6:41
You do have this geographically though.
So you could combine them with the shapefile. Oh OK.

Verdegan, Travis (DNR) 6:51
Yeah, some of this once we get to the point of being able to provide templates.

Scott Linn 6:52
What?

Verdegan, Travis (DNR) 6:58
That that's a little easier to do because you can put together the list of stations just by the state and and county or whatever.
Designation geographically that we'd need to do there and then we wouldn't have to rebuild them every time you come in.
So those are all definite steps that we can take as we continue to progress through this.

Scott Linn 7:24
Yeah, a lot of these.
This is again, we were at the crawl then I think we're barely at like. Well, we were at the the.

Rollover stage with the original release of this and now we're starting to crawl with the power BI reports.
We're getting to what you guys are looking at and trying to display.
That's gonna be more of the walk.
As we get to the full on you know what we can do and the capabilities moving forward.
So piece by piece is where we're trying to go to.
Don't you know I'm? I'm not saying we can't do any of this stuff, but we gotta figure out how to make all these connections and get everything to work.
And then really make it the most effective because instead of us building all of these individually for everybody, I think as Travis has kind of alluded to, the templates are really where we're trying to go at with this.
Because then you can build your own.
Have it and it's standard template.
And you don't? All you have to do is do the filtering yourself.
And you always have that set up.
And then you don't even have to worry about.
Family get into our data.
But you don't have to worry about building the report. You just do the filtering yourself so that I think is really the utility of this is going to come in and that where we can start showing more of the, you know, possibility of analytical information as well.
Other questions on the reports page and what's out there. Like I said, just kind of keep checking that periodically because we're adding more and more reports as we as we get forward. So as we go forward.
OK, the data download.
There's been some questions about removing the restrictions that we have.
So again, when you do your daily, we have the only one year up to 10. You know for one one year greater only one station and then the 10 stations for two weeks or longer. We are working on getting this.
Expanded out and there's there's multiple processes.
We have to do the first one is we're trying to set up a queuing system so that if you are basically we, we have a problem where we can do up to like 5-7 stations at a time if we have one user concurrently operating since we can.
Control that just yet.

We have to build a queuing system.
For the users. So if we are, say in a training at 491 and everybody wants to grab data. We need to make sure that we don't break the API with that, so the developing the queuing system so that as you start your download process, then in the in the next person does it while that download is happening, they get queued up.
It gives him a message basically saying Yep, you're #2 in the queue and you're down will start shortly.
That way we don't break the system.
While they once they get that, we'll be able to expand out and be able to have again up to I think right now we're shooting for seven stations at one time for the entire period of record that we have.
And so that'll help out with really that need and that that request that everybody's having for getting more data at one time.
We're hoping to have that in the next couple of months.
I think that's looking at the three possibly 35 release in mid-december, more likely going to be a three, six release. I believe that's probably in the out in like February or March time frame, so.
But we are hoping or we are pushing to try and get that completed earlier.
So those are some of the, I guess changes that we have coming up with.
The download piece.
I know the other question was.
Getting station ID back in the charts and I know that that has been one that we put off during this transition time and I guess I'm going to ask, you know, are you guys ready to have that because that's going to require you to adjust your queries?
Or are you guys surviving without the the station I DS and the downloads as of right now?
You're good without it.
Everybody wanted it before.

Allison, Kristen - FS, CA 11:52
Yeah, I'm the opposite.
Let's rip the Band-Aid off.

Scott Linn 11:55
That's kind of what I thought.

But.
That was all right.
So I will.
Yeah, I guess we'll have to make a decision on that one and see.
I know Kevin Osborne was used to be a good for.
For vocalizing that one so, but he's not.
No longer doing all the work, but. All right. We'll see where we wanna go with that one.
But that one is also out there to try and get that the fems ID or the the station.
I shouldn't say fems ID the station ID back in the downloads.
And back in the.
CSV file format so.
Let's see here.
Other than that long term planning, so where we are trying to move forward with in femso?
Beyond 35 release, we are looking to try and integrate more of the weather data issue not issues, weather data corrections and and moving towards.
Having an automatic fill for a missing and quality.
Control their quality issued.
Weather information.
So we're really hoping that by, you know, July.
Ish time frame of next year that we will be able to have almost basically like a once a day we'll go back, we'll gap fill and we'll QC the data and we'll be able to you know have that updated and then do recalculations near you know once daily.
So that we won't be seeing all these gaps in our information.
If you get a 200 mile hour wind speed or if you forget to take the.
Rubber band off the rain gauge or if you turn your solar radiation sensor upside down for two weeks, it's going to catch all that and it's going to do the corrections for us.
So we're working to try and get that so that we will have all of that going forward hopefully by summer time of next year.
That's kind of a loose goal at this point, but just kind of give you an idea of where we're moving forward.
With.
So.

Let's see here. Bravo, is anything else?
I guess my other big thing would be snowflakes that time of year snowflakes are starting to go on.
Understand that our tolerance is right around a trace snow.
So if you start getting a trace snow and you will start seeing your snowflake on and off this time of year, I know that that is.
One thing that we are also looking at, but we know I know that that's not as big of a deal this time of year for everyone.
It's more of the springtime where, hey, we had a skiff of snow and it came off and we wanna go burn, but yet fire, the indices are showing like, you know, zeros.
So just make sure that you.
Make sure you start tracking this and seeing if there's any issues.
Is there snowflakes either coming on or going off?
And if something's wrong or completely wrong, and remember that it's not the individual location that it's looking at, it's looking at the broader 3 kilometer grid square around there.

L **Law, Shelby - FS, UT** 15:01
Bye.

SL **Scott Linn** 15:08
So you have to take.
That into account when you're considering that that you know, is there snow in that entire area or not?
Another piece I guess we've had a couple of questions on and it's been brought up and it was brought up I think on the prescribed fire or will be on the prescribed fire slides.
Is when you start looking at.
Say 10 hour fuel moistures for doing prescribed fire. And if you want to go in here and you start taking your fuel moistures you want to put these in to behave.
It is strongly recommended that this is not just a reminder that this is a Nelson model and and behave runs off of fosburg and they are not going to match.
They are different and if you model your fire behavior runs and behave and then you come in to verify the day of or track the day of to see if you're within prescription.
These two numbers will not you know, your your fosberg will not line up with what?

Behave under Nelson or. Sorry, what we have here and Nelson will not line up with what you modeled off of.
In behave the falsberg or if you were to go out and take.
The weather inputs and run them through behave and or did a you know?
Field field level calculation so.
Just a general reminder of that that you can't.
These are not interchangeable.
Nelson tends to run a little bit higher for now.
And that you need to be cautious when you're doing that information now.
That doesn't mean you can't use these four seasonal tracking and understanding where you're at. If you're increasing or decreasing in fire danger, that's a this is a that's a great utilization of fire danger and these and these values.
But just don't use it in the fire behavior calculations, because they will under predict where you're at. So.
Questions on that.
Kelly, did you have any thoughts on that one or anything you wanted to add it in?

C **Cagle, Kelly - FS, NC** 17:36
I'll just say, Scott, you were probably preaching to the choir on that one, but we've dealt with that quite a bit in the Southern region and we're trying as hard as we can to educate folks to use fossil burg for fire behavior. And Nelson for National Fire danger.
Rating system.

SL **Scott Linn** 17:56
I know Matt is trying to work on some calibration processes to try and get Nelson to line up better with fosburg, but I don't think he's quite there yet and I know he's been laid off honestly for a month now so.

C **Cagle, Kelly - FS, NC** 18:10
OK.

SL **Scott Linn** 18:11
Excellent. Well, if you find anything else out, please let me know.
And like I said, I'll I'll work on trying to get you those those other points as well, so.

Cagle, Kelly - FS, NC 18:19

All right.

Thank you.

Scott Linn 18:20

Yep, Daniels will 35, include the 10 hour fieldstick outputs by chance.

What are you looking for on that one, Jamie?

You wanna know the actual measured values from the stations?

Display measure values.

No, we don't have that being in part of 3/5.

I don't know if that was ever captured.

Travis, do you remember hearing about trying to move that in as if the station has a 10 hour fuel stick displaying it?

Verdegan, Travis (DNR) 18:54

It's.

It's been part of conversation.

There's never been anything put on the road map as far as how to do that.

So the other, the kind of similar thing would be soil moisture.

Soil moisture is gonna be a lot more tricky. 'cause. We're gonna have different sensors and depths and everything like that.

But essentially, soil moisture and measured stick moisture are gonna be analogous to our field sample data. Only instead of sending somebody out to go gather it.

We've got automated sensors that are gathering that information, so both those things are not part of the the model itself, but definitely are things that can help to inform decisions.

Scott Linn 19:39

Yeah, might might be able to Chuck dig into that one a little bit off.

Verdegan, Travis (DNR) 19:44

Yeah. I mean, I think that's a good reminder.

That's something we could put back out in front of us.

That's kind of enhancement to the system based on the data that we do have available to us.

Scott Linn 19:49
Mm-hmm.

Verdegan, Travis (DNR) 19:53
We just had to figure out a way to work it into the user interface and display and what not.

Scott Linn 20:01
Great. Yep. OK.
OK.
Let's see here.
Oh, the yeah. The other piece, obviously in three, five releases trying to get or getting the mizonet states.
Networks added for the eastern half of the US, and so we're working really diligently on getting that completed that anticipate that is anticipated to be out for the release in December.
There are also discussions about getting.
Historical information or a period of record inputs for a saw station so that we can have seasonal trend charts for those as well and the possibility of expanding the ASOS network across the rest of the country.
So there are some discussions around looking at how to further that information going forward.
And I'm hoping everybody starting to pick up on the trend is that.
We're really focusing.
A lot still on the data integrity and the data piece going forward for the time being because if we don't get all of these corrected now.
When you start producing all of your analytics, you start seeing in in some piece of data is wrong.
All that does is, you know, emphasize really the problem that the data had, and so we'd rather focus on this piece. Now let the field get.
The displays that they the data that they need and they can work on doing their analytics on their side. While we then work at the long term picture of where fems is

going to go.
But we need to fix.
We need to get this data piece really hammered out first before we spend or get into any of the analytics itself and and other displays of that.
Because once you start going down that road, it's hard to go back.
To just you know, dealing with the data piece so.

VT **Verdegan, Travis (DNR)** 22:20
Yeah. And I mean on the plus side to all of that, we've gone through the process, right?
We brought in ASOS for the eastern half of the US. The process to do that for the western half we can we can recreate.

SL **Scott Linn** 22:27
Good.

VT **Verdegan, Travis (DNR)** 22:35
It's more of a matter of assigning priorities and and time and things like that from the developer standpoint.
So a lot of the stuff that that y'all are asking for.
Are things that are very close and.
It's just literally we gotta work the process.

SL **Scott Linn** 23:00
All right, I've yammered enough.
Long enough.
What questions we have out there?
Yeah, Dan.

BL **Borsum, Daniel L** 23:22
Hey Scott, I may have missed this at some point in the conversation, but what do we do about bad data?
Do we file a report or something like that? Or because I found a station that's got like 180 and 200 mile an hour winds in a one month stretch and?
It it didn't necessarily skew fire danger stuff, but when I was trying to do an

evaluation of stations which were possibly poor candidates for being in FDRS sites because of the sheltering factor.
It skewed those results, so I was just curious what's the best way to go about that? And more specifically, if it looks like it's a window of time, is that something we just ask somebody to make missing?

Scott Linn 24:06
So we are not.
OK.
So what the long term or what the plan is and this gets into exactly what we were talking about with the data so.
What the process is for right now, we're gonna. The data's going to be in there. If you would like to remove that out of your data source, you can go ahead and delete those records.
That's basically what Firefox would do anyways.
Would just say that record doesn't really exist.
And so so you can remove it.
I know. Obviously like I said, as you move those really extraneous.
Values it doesn't impact.
Your your overall percentile values in the big picture.
The long term process for this is getting into where we have tolerance levels already set up and so that individual points as the observations come in, they will then check to see if one the observation is missing or not. If it's missing it will fill it from the.
Grid.
If it is not missing, it doesn't meet a certain tolerance level, then it will pull the data in from the grid.
So if you start seeing Twitter Mile wins, it would replace that with, you know, whatever the nearest grid point was showing for that hour.
We need to, though, establish those tolerance levels and have that algorithm.
Built up through WRCC with with Tim Brown and so.
That process is just starting where we can get them. We can start working with him to get that information.
They're going to redo the period of record which will be really just getting rid of those extraneous hours.
And gap filling or or seeing that data and actually changing the data and then.

Again, we would like to have it so that the original or that as we move forward, all the data will be going through that process in an automated fashion.
That way we don't have units needing to go in and do all these manual fills and all this information that we're used to in the past.
So again, I'm just asking for patience on this one that we are working on. Getting this process identified.
And solutioned out so we can get it implemented into the data or into fems itself, I should say.

Borsum, Daniel L 26:29
All right.
Thanks Scott.

Scott Linn 26:35
Yeah, Mr. Turner.
How you doing?

Scott Turner 26:39
The the FDR as or the averages.
Is there a plan to incorporate those in the stats graphs as well? Once you get the power BI figured out or more developed?

Scott Linn 26:55
We haven't gotten into.
We don't have a standardized fdra map coast to coast yet, so that's the problem.
Well, that's one problem.
And so where all that's going to integrate it into is yet to be determined.
Yes, we are wanting to be able to get that information for the field, but again, we just don't have the specific road map of what that looks like just yet laid out.
So it's gonna be a while. I would say if you know again field solution is going to be the answer for the time being.

Scott Turner 27:37
Thank you.

Scott Linn 27:38

Yep.
And a lot of this development is honestly very contingent on budgets going forward.
So since we don't have one.
Everything's very kind of up in the air at this point.
Other questions?
Quite a group today.
OK. Travis, do you have anything else you wanted to add in?
Topics I might have missed.

Verdegan, Travis (DNR) 28:51

I think you covered everything.
I know the you you mentioned the the period of record.
I don't know if we talked about any updates to that, but we are shooting to get.
Up to 2024, right?
So that is something that may be coming if we're able to get to it. That piece in place as well.

Scott Linn 29:15

Yeah. So that would be the 2023-2024 data.
Any of the gap fills would be and then it would be quality checked as well so.

Verdegan, Travis (DNR) 29:25

Yeah, it'd be like that period of time for all stations if we, for instance, had a station that didn't make the cut for the original period of record.
But we've got a couple more years of data that we could throw in there.
Those are ones that could come in as well as they saw us. Museums in New Orleans, other stations that don't have them, that fit the the bill for what we're trying to do there.

Scott Linn 29:54

Thank you for bringing that one up.
Yep, we're working on doing that as well, so.

All right. Going once.
Going twice.

Cagle, Kelly - FS, NC 30:18
Hi, Scott, this is Kelly again. I thought of a question.

Scott Linn 30:20
Yeah.

Cagle, Kelly - FS, NC 30:21
Should the decision get made to use the 20 foot winds for the forecasted indices?
What kind of time frame would you foresee that?
Are we talking weeks or months or what would you think on that?

Scott Linn 30:35
It would be a couple of months before we get that.
So there was a question that was raised last week, and I did put the answer in the chat was are the forecast winds converted down to 20 foot?
No, we are not converting the winds down from the 10m down to 20 foot.
So that's where we're seeing some of the. There were people are observing some of the discrepancies between especially in BI is that wind influence from the 20 foot because?
You know it's a.
It's a a difference of what?
10 feet.
So that's where we're seeing some of the differences between that the discussion is.
Does fems change go through?
A.
A.
A converter and convert those 10m winds down to 20 foot and display it and calculate it that way.
Couple of questions that come around with that are then when do you start looking at?
Forecast wind outputs and and if you see those and then you compare those to a spot weather.

Or if you compare them to any other weather forecast in the forts from the, sorry if you compare those from any other Weather Service outputs, you will be having an issue because you'll be seeing some differences from the general forecast winds.
So that would be 1 issue that we see.
So we would have a non standardized forecast wind for this.
It would also not solve the problem.
Of wind sheltering from our station.
So you're probably still gonna see the a difference between those, because we're talking about just doing a standardized conversion from 2010 meter down to 20 foot.
So you're still probably gonna still see some inaccuracies with the two.
So we're having those discussions, what that would look like for the forecast winds and if we want to make that change.
Happen or not?
So.
But if it does, it would probably be a couple of months before we do see that.

C **Cagle, Kelly - FS, NC** 32:45
OK.
Yeah. Thanks for that explanation. And if we could do something to sort of close the gap a little bit between forecasted and actual, it would be helpful.

SL **Scott Linn** 32:55
Yeah, and yeah, like I said, there's there's a lot that's gonna factor into that as well.
I mean, you also have to remember, because now Woof just is pulling from us as well.
And how their forecast looks and then it ties into as well.
Any, if you look at Flam map and if you pull our weather forecast from the Flamm pulling our weather forecast in which I believe they do as opposed to like Wind Ninja.
So there's there's a lot of questions that come down to, you know, well, why is this forecast showing this and why is this showing this and how that's impacted so.

VT **Verdegan, Travis (DNR)** 33:42

Yeah. The the crux of the matter there really is that analysis is done on observations and decisions are made on forecasts.

Scott Linn 33:50
Mm-hmm.

Verdegan, Travis (DNR) 33:52
Aligning those two things.
Something that takes effort on both sides of the observation.
Forecast boundary there.

Scott Linn 34:06
Yeah, and and right right off the bat, we're we're doing, we're comparing or we're looking at gridded forecasts and gridded information and we're looking comparing that to a actual on the ground spot.
Spot, you know, observation. And so those two are not gonna line up as much as we ever try to.
It's going to be very difficult to get those two to ever really mirror each other because.
They're two different systems.
As as Travis, I think pointed out originally, if we know that we're consistently high, at least we know we're consistently in One Direction and you can adjust for that.
It's really hard when we're consistently we're we're accurate, but we're not consistent.
You don't know if it's going to be high or low, so if you know that you're on average 10% high on the wins, you can make that you can make that you know a quick adjustment kind of on the operational side.
Of your outputs and say OK, I know I'm going to be a little bit high on this.
And we can bump it down 10% or whatever, so.

Cagle, Kelly - FS, NC 35:22
What we've seen in the southern regions, God is it's our staffing levels tend to run about one staffing level above reality. You know fairly consistently except on a rainy day.
They're they're spot on, but on a dry day, we're running about one staffing level too high.

Scott Linn 35:40
OK.
Are you guys in as running BI?

Cagle, Kelly - FS, NC 35:48
Yeah. The ones that it's most pronounced are running bi, yes.

Scott Linn 35:52
Mm-hmm.

Cagle, Kelly - FS, NC 35:56
And I've still got data coming in I've not.
I've not heard from everybody, but that's the majority of the feedback I've been getting.

Scott Linn 36:04
The forecast is running that just one step in a little too high, OK.

Cagle, Kelly - FS, NC 36:08
Yes, correct.

Scott Linn 36:16
Good information. I appreciate you sharing. Like I said, yeah, if you get more, if we can get some site specific information, it would help out in general with us so.

Cagle, Kelly - FS, NC 36:26
Yeah, I'm going to forward you some of that sometime probably next week.

Scott Linn 36:30
OK.
Any other questions? Discussion topics?
All right.

Scott Linn stopped transcription