00:04
Hey to all you fish enthusiasts out there. Whether you're an avid angler or just curious about fish, we'd like to welcome you to Fish of the Week!, your audio almanac of all the fish. It's Monday, November 13 2023. And we're on a week by week tour of fish across the country with guests from all walks of life. I'm Katrina Liebich with the US Fish and Wildlife Service in Alaska,

00:20
and I'm Guy Eroh welcoming you to part one of a Pyramid Lake double feature, we're gonna be talking about a very cool and very important sucker called the Cui-ui.

00:34
And I'm very happy to introduce our guest. Eric Horgan is a fish biologist with the Lahontan National Fish Hatchery Complex in Nevada. Very warm welcome.

00:44
Thank you for having me. I am with the US Fish and Wildlife Service, but we're a complex so we're very unique in that we have three main facilities. So we have Marvel Bluff out at Pyramid Lake, we have the hatchery in Gardnerville, where we raise Lahontan cutthroat trout. And then we have a Fish and Wildlife Conservation Office in Reno. And we're all housed under kind of one big facility. So I work at all of them. And I'm the facility manager out at Marble Bluff.

01:12
Awesome. Okay, so let's get to know this fish a little better. And I guess first with the pronunciation. How do you say its name?

01:19
So the tribal pronunciation is koo-e-yoo-e, but kwee-wee is how we refer to the fish.

01:26
Okay. And if you were to meet this fish kind of face to face, how would you describe how it looks to someone who's never seen one before they got a pretty cool face.

01:35
Yes, they have a very cool face. So their mouth is very fleshy, it is pointed forward and slightly down. So that way they can eat Chironomids and things like that off the lake floor. Their eyes are also very amazing. They just look like they have such an awesome history behind those eyes. They are very long lived hardy fish that live only in Pyramid Lake, and it is amazing to see them. The first time I ever saw them was when I first got this job back in 2007. And they have an iridescent blue color to them kind of getting into darker browns on their backs and then those towards a white belly. They have large pectoral fins and they are very strong fish. When you try and measure them, they will do anything they can to try and get away just a solid arch and they'll hold it stick all their fins out rigid. And actually I think that's a mechanism that they use to avoid bird predation. But they're very cool fish. They're very neat.

02:40
I read somewhere that Indigenous people kind of would flock to the Truckee River and Pyramid Lake and the pelicans were kind of signal like when they started seeing them come around. It's okay, time to get to the river because the Cui-ui we are running.

02:52
That is true. That is totally true. I have heard that exact same thing from tribal members.

02:57
Do pelicans prefer Lahontan cuts over Cui-ui or one or the other

03:02
I would say query we fit the size class that pelicans can potentially eat and manage without, you know, causing injury to the pelican and they can also take smaller cutthroat trout. We'll definitely see scar marks on cutthroat trout from pelican strikes as well as cormorant strikes. But right now those Lahontan cutthroat trout are getting quite large that you'll see a pelican actually grab one and decide to let go instead of try and take that fish down. But for the most part, they would target Cui-ui and that historically has been their target fish species for the pelican community around Pyramid Lake. They only show up to pyramid to target the Cui-ui spawn and the large spawning runs that happen out of Pyramid Lake and to breed and reproduce on Anaho Island. So after the Cui-ui and LCT run are over, the pelicans migrate back south.

04:01
You say LCT that's the Lahontan Cutthroat Trout.

04:03
Yes Lahontan Cutthroat Trout.

04:05
What's a typical life for one of these suckers? What do they need to reproduce? Like what habitats are they using?

04:11
They do need a lake environment and they do require a river for spawning. One of the biggest factors that plays a part in their spawning and reproductive purposes is water. And that starts for us with snow. So we determine whether or not we could potentially see a good run of Cui-ui based on our snowpack because they are triggered by an increase in runoff in the spring. They like a certain temperature around that 15 degrees Celsius range, 13 to 15. And in the Truckee River system turbidity plays a large key factor to attract to the Cui-ui out. So those factors play a big part in telling them that the river is ready and okay, and there's enough water for them to move from the lake into the river system to spawn. If those factors don't trigger them enough, they'll actually just decide to stay in the lake. They are obligate stream spawners, so they definitely need that temperature and that moving water in order to aerate those eggs and have a successful spawning run. But yeah, it can go anywhere from, you know, 1.3 million fish in one season down to no fish the next season and it all hinges, water.

05:25
Oh man

05:26
There is an interaction between LCT and Cui-ui. And we've seen this on the Reds that come from the Lahontan cutthroat trout when they're trying to spawn. We've noticed that when Cui-ui are in the system at the exact same time as Lahontan cutthroat trout, they capitalize on the clean gravels. The LCT have excavated for their redds. So we'll see Cui-ui coming in and laying their eggs, broadcast spawning, over the mountains of the redd. So they kind of work together in that aspect.

05:57
I'm hoping you can tell us a little bit about the history of the hydrology of the Pyramid Lake system. You mentioned Truckee River, I guess what was the system like historically? Yeah. And how has it changed?

06:13
The Truckee River is a large river and it flows from Tahoe to Pyramid Lake. There weren't any dams at that point. So Cui-ui could naturally migrate up and Pyramid Lake to paint an even bigger picture is a remnant lake of Pleistocene Lake Lahontan. That was about 5000 to 10,000 years ago, when this larger lake was around. And that covered much of northwestern Nevada. And when the glacial period ended in the climate started to change, it started to dry up and left these remanent lakes like Walker Lake, Pyramid Lake and Honey Lake, and that's where Cui-ui reside. So they're living on ancient lake beds and the Truckee River does cut through those ancient lake beds. So they need to actually kind of move past some of this ancient lake bed to areas where they have better spawning grounds. As time went on, more diversions of the Truckee River water occurred with dams, which kind of segmented out the Truckee and one of the biggest dams that was built that caused the most issues was Derby dam, and that was built in 1905. And that is the largest diversion of Truckee River water out of basin. It diverts it down Truckee River canal out to Fallon and Fernley for irrigation of farmlands. And after they built that dam, it actually dried up from that dam down to Pyramid Lake, which I believe is approximately like 60, 60 miles, maybe 50 miles of river habitat. It would dry it up completely at certain times of year.

07:49
Oh, wow.

07:49
As well pushes down into degraded Lake habitat. So without water flowing into Pyramid Lake elevation goes down. And then you have you know, harder access into the Truckee River due to deltas that have formed at the mouth of the Truckee River. When Derby was built and all of that water was diverted, Pyramid Lake levels dropped so far that actually exposed a little nick point and it started a head cut. Once the Truckee started to flow back over that area. The head cut is basically a migrating waterfall and because Pyramid Lake is a remnant lake of glacial Lake Lahontan, it is on those ancient Lake Lahontan fine sediments, very mobile sediment. It can erode very quickly and change very quickly with

change in water flows. So with the massive diversion of Truckee River water at Derby dam, it accelerated the decline of Pyramid Lake, which were the Truckee River entered Pyramid Lake was the start the nick point of this head cut. So once river water started flowing past Derby again, it started to erode over that and slowly start eating upstream. And it got worse and worse as it migrated up the Truckee River that was a natural fish migration berrier.

09:05
Oh, man. Okay

09:06
It was about 40 feet tall. They couldn't get above it, neither could the Lahontan cutthroat trout. And so something had to be done. And that's where Marble Bluff fish passage facility was built. It was built to stop that head cut and provide fish passage. And marble Bluff was built in 1975 by the Bureau of Reclamation, and that was initiated by the Washoe Project Act, just because of the geology of the area and the mobility of the sediments there. It needed to be addressed. It couldn't have been left alone, it would have just continued upstream until it hit bedrock. There are two fish passage options at Marble bluff that we can utilize depending on Lake elevation and the water year. So we have one, which is the fish way, which is a three mile long, earthen channel that parallels the Truckee River from Marble bluff all the way out to the lake, about a quarter of a mile away from the mouth of the Truckee River. That channel can be utilized when lake elevations are so low that Sandy delta becomes impassable or very challenging for the fish. We can then turn on this fish way, and then have some sort of recruitment by putting fish up above the Marble Bluff dam where they can gain access to spawning grounds. So in normal water years or water years where we have good Pyramid Lake elevation, good water and the Truckee River, fish can then enter the Truckee River and then they will come up all the way to the base of the dam. This is the preferred method that we have for fish passage at Marble Bluff simply because it can handle a lot of fish at the base of the dam, you have a lot of water on them, and Cui-ui can decide to turn around and go back to the lake if they want. Or they can decide to stay at the dam and continue to migrate up and wait for this lift system. So that lift system is how we get those fish up over Marble Bluff Dam if they decide to enter the the Truckee side of it.

11:05
So if a fish comes up to that spot, like what happens? So how does that lift work?

11:09
Yeah, that's exactly what you're thinking, that's a very unique system that uses an elevator type lift. I always like to put it in the frame of mind of fish that fish love water, and wherever there's more of it, that's where they're gonna go. So that's how we attract them in and through the facility. So once the fish hit the base of the dam looking for fish passage, we attract them into our entrance channel, which is gravity fed flow from of the dam, then once the fish enter our entrance channel, we guide them into our fish lock. The fish lock has its own supply of water from the reservoir above the dam and that door and that flow is open a little bit more. When they get to the junction they feel more water pushing on one side of them. They'll then make a turn and swim right into this fish lock. The fish lock is what houses the elevator. And the fish lock is similar to a ship lock.

12:03
I'm thinking Great Lakes Welland Canal.

12:05
Yeah, exactly the same,

12:07
We can decide to isolate the fish lock, which then gives us an opportunity to see how many fish we have that came in during that set time. If we don't have a lot, we can up that time on the next set to have more fish. So then the fish check, we raise the fish up, we will look and see how many fish we have with this false floor. And we're taking them just barely out of the water to get an idea of how many fish because we have a staff gauge that can give us a volumetric estimation. At that point, we lower the floor back down. And let's say we decide to cycle it. So cycling, it would be flooding the lock like a ship lock, because it's completely isolated. If we put water into the lock, it's going to fill up that 40 foot elevation difference. And then that false floor can then guide the fish up that fish lock shaft, keeping them in the water the entire time, which minimizes stress and mortality, and actually allows us to move more fish because we're not moving the sheer weight of the fish, since they're just in the water column. So then that floor can come up. Once the water equalizes with the upper river elevation, we have a door that opens and then the fish will swim out. But how do we get them out? We have to have a little bit more water flow to attract them out. So we crack the drain and the fish lock. And at that point, the water from the river is just flowing straight into the fish lock. So now they feel that little movement of water and they're attracted straight out into the river system.

13:18
Yeah, that's cool. Cool technology. Wow.

13:37
Yeah, it's a very unique system.

13:39
How many fish have used this elevator over the years?

13:42
Oh, man, millions of fish, I would say in one season our best was 1.35 million fish. And last year, you know, 550,000, something like that. So yeah, but every year, yeah, every year is different. And you know, we pay attention to those water cues and temperature cues of the river to tell us if or when we could see a large query run.

14:09
Eric's got a big smile when he's talking about this elevator.

14:12
It's fun. It's my bread and butter. I love the the fish system. It's so much fun, very unique system and can move so many masses of fish. That's the beauty of this system. Every hoist that I talked about or

every cycle of that false floor with the elevator can move 3000 Cui-ui every 15 minutes. So yeah, and we will max it out. We have to cut it off like in three minutes of allowing fish in we can have 3000 fish in that little lock system. And then we have to get them up and out.

14:45
That'd be an awkward elevator ride with that many people going in

14:48
I know right? Cram them in.

14:56
Okay, it's that time this is minute with Maria. Maria is joy joining us again from Choggiung lands in western Alaska and is helping us elevate Indigenous voices and perspectives on this show. So welcome Maria,

15:07
Aang aang [Hello everybody in Unangam Tunuu]. I'm so happy to talk about what my passion is. Thank you.

15:11
Yay!

15:11
Okay, so what's standing out to you as we're hearing from Erik today.

15:15
When I hear Erik talk, I'm really fascinated by all of the cooperation on behalf of all the teams working on the water issues in this area. I can't believe how much it takes. And it seems like they really do a good job communicating with one each other whether it's on the federal, tribal, hatchery levels, irrigation systems and field researchers and the technology. It's crazy.

15:39
Know that elevators super cool.

15:40
Yeah, I'm wondering if it ever breaks down? What do they do?

15:44
Yeah, that's I guess that's one of the challenges when you have these kinds of technological fixes for large, complex issues like this.

15:51
Yeah. It's amazing that we even have the systems in place for the fish to survive and thrive.

15:56
So one of our guests next week is going to be Autumn Harry. And she's a Paiute woman. She's a fly fishing guide, and our homelands are in this Pyramid Lake area that we're talking about today. I know water isn't in short supply here in Alaska, like it is there. But what are some similarities, you're starting to hear about this place and where you live when it comes to fish and their importance to the Indigenous people living there?

16:20
What Erik's talking about, if you're there, you can see the remnants of what the water used to be like. And so I guess for me, it just kind of takes me back to like the ancient civilizations that were there, and the ancient tribes that stewarded this land for ages, I really feel the Indigenous connection and ties to that land and being able to be there and see that and witness it would be so incredible. I'm so thankful to hear about this place, and the tribes that steward that land. As far as the fishing goes, I mean, these fish are ancient fish, and they've survived there for so long. I can imagine that they've been used for ceremonial uses since the beginning of people's time there. I can't wait to go there one day and hopefully see these fish.

17:01
Awesome. Okay. Well, good to have you. And we'll see you next week.

17:04
Qagaasakung, thank you!

17:10
Do you ever get to a point where you have simultaneously fish trying to get up the river and coming back down from spawning? Where it gets kind of mixed up, and you're trying to figure out how do we make sure that the fish that are going up actually got out and the fish are trying to come back down and have enough time to get in?

17:28
For the most part that out migration has a good time difference between their migration for spawning. So LCT will come in first, they'll go up, they like to cooler water, and then it'll transition into Cui-ui because they like warmer water and we'll be letting them up. The elevator system isn't designed to let fish back down. It's only to put fish up. The fish will then naturally go over the spillway of the dam, which is two drops it to get them down that 40 feet elevation difference. And then there'll be back down below the dam.

18:03
And there's pretty good survival coming down that?

18:06
It is it is. We get returns of Cui-ui and LCT from past years. So you know, there is probably some associated mortality with it just due to the natural stress of spawning and everything and then out migrating back to the lake. Cui-ui do spend a very short amount of time in the Truckee River only about

four to six weeks. And then they have to migrate back out just due to the physiological toll that the freshwater will put on their bodies after they leave Pyramid Lake since Pyramid Lake is a saline lake.

18:39
So what's the salinity of Pyramid Lake, you know, maybe not parts per 1000 or whatever. But like relative to the ocean or say the Great Salt Lake which is very salty.

18:49
It's about a quarter of the ocean salinity. So it's definitely noticeable for sure.

18:55
Do they currently inhabit like Tahoe or is that water too fresh?

18:59
So historically, Cui-ui never really migrated up that far up the Truckee River they would get to what is called the vista narrows, which is usually just before you would come into Reno traveling upstream from Pyramid Lake. That was I believe the for this upstream migration of Cui-ui.

19:17
I'm curious. So you talk about Derby dam. That was actually the first project under the Reclamation Act under what became the Bureau of Reclamation. You also have what was Lake Winnemucca off to the side there. Was a National Wildlife Refuge, was the first national wildlife refuge to lose its refuge status because of the loss of water. And it was Cui-ui abitat at the time. So it's relevant for this episode. But what is the relationship then between your agency U.S. Fish and Wildlife Service and the Bureau of Reclamation in terms of distributing water and making sure that there's enough water for these fish and for these habitats? Does Fish and Wildlife Service have any authority outside of the refuge boundary to make sure that the refuges still doing good or not at all?

20:04
So the Fish and Wildlife plays a part in water management with a group called TROA MOA. The Pyramid Lake Paiute Tribe is a very valued partner since the Cui-ui is one of their historic tribal fish and they still do subsistence take on it tribal take on that fish. So it is very important fish to keep spawning, we would all have scheduled meetings during the spring when needed or we felt needed to help decide certain flow regimes that we do have for the Truckee River which became part of TROA MOA, which help us determine the amounts of water to call for during certain months of the spawning season. And those flow regime levels are at one through six based on our snowpack and how much water we have in our storage for the fish. So that's one avenue of it. So the Bureau of Reclamation is the Lahontan basin area office and they monitor and maintain all of the dams on the Truckee River. So if any water releases need to happen, that would go through their office after being asked by the watermaster. And then if any maintenance needs comes up, let's say at Marble Bluff dam or Derby dam, the Bureau of Reclamation would be the office that does all of that maintenance as well.

21:23
This was one of the first species listed under the ESA yeah?

21:26
It was, The first one I believe.

21:28
Oh wow.

21:28
The first one. Okay. What year was that?

21:31
That was, oh man 1967, I believe.

21:34
'67.

21:35
Okay, so this fish was listed in '67. So that means it must have been under the Endangered Species Preservation Act which actually predated the 73 Endangered Species Act. So I'm curious, unlike the Lahontan cutthroat trout, it was never extirpated from Pyramid Lake is my understanding. So what kept it being able to continue to exist in Pyramid Lake and then what is keeping it on the endangered list now/what's keeping it from coming back to its full potential.

22:02
So one of the main things that initially happened to help maintain Cui-ui in Pyramid Lake was in 1972, the US Fish and Wildlife worked with I believe his name was David Koch, and developed the Koch Cui-ui Fish Hatchery. And that was developed to help supplement the Cui-ui population in Pyramid Lake and to rear them. And then it also helped to provide like a backup population to the year classes that were still in the lake. So that way, once natural reproduction could start again in the river, we had enough year classes to sustain that. And then in 1977, the hatchery and the techniques there were then transferred over to the Pyramid Lake Paiute Tribe, where they continued to raise Cui-ui every year and stalk them into the lake. And then another big factor is there is dedicated water to the fishes of Pyramid Lake. And it is in Stampede Reservoir. And it's about 204,000 acre feet of water that we can utilize for the fish of Pyramid.

23:10
Okay

23:11
We can't use that water to make a fish run. But we can use that water to facilitate a natural fish run. So if we had good flows, and we saw fish in the river, we could call on a little bit of water to help facilitate that if air temperatures started to increase, you know, bringing up the river temperatures. Now with that water, we have to manage it, right? So then we had variable in stream flow regimes that were developed. And those just help us determine the best way to utilize that water when we need to call on

it. So we could still also keep some in reserves for future years of spawning, because we tend to go through three to five year drought cycles here. So having that large reservoir of Stampede as a backup of water to help facilitate spawning plays a large part in Cui-ui recovery.

24:07
You mentioned that there's a limited capture fishery that the Paiutes have. I'm curious within the ESA how that's written into the law.

24:17
The Pyramid Lake Paiute Tribe has a permit with Ecological Services of the US Fish and Wildlife service that allows them take of Cui-ui for subsistence, and it's on a limited number. And they also take the operculum from these fish for age as well as they get the sex and the length. So they are getting scientific data and then after that data is collected if the fish is then taken for subsistence use by the tribe.

24:47
Okay, cool.

24:48
Yeah, and Marvel Bluff fish passage facility is listed as a method that the tribe can utilize to help get Cui-ui for this purpose.

24:58
What do they do just you net them there?

25:00
Yeah, so as the Cui-ui would exit the facility, that's where we take sub samples of the query that are migrating through the facility. And we do this all season while the fish are migrating. And, you know, that helps us get the metrics that we need the sex ratios length, if they're ripe or not. And at that point, we can also then instead of releasing that fish back into the Truckee River to continue migrating upstream, we could then take that fish and give it to the tribe for research purpose and subsistence fish.

25:32
Okay.

25:32
And I mean, we're talking this is a pretty complex system. We've got the head cut happening, we've got water issues, what are some of the conservation efforts to date, in addition to the ones we've talked about already

25:46
You know, Lahontan National Fish Hatchery complex does work really tightly with the Pyramid Lake Paiute Tribe, we, you know, try and works well to get the fish taken if available. And we also work tightly, you know, with all of our other partners, the Bureau of Reclamation, the federal watermaster,

Truckee, Carson Irrigation District that divert water out of Derby, you know, we all kind of have to work together. And it is kind of, you know, all of us working together that help manage the water for recovery of the species. Yeah, not really one entity, but it's everybody coming together I believe, and that the lot National Fish Hatchery complex is very unique in the fact that we have these like three legs that we kind of say we, we have that hold up this complex and, you know, one of which is the operation of Marble Bluff fish passage facility. One is our hatchery and Gardnerville, where we raise Lahontan cutthroat trout, and the other is our fish and wildlife conservation office in Reno, where we monitor the reintroduction of Lahontan cutthroat trout into their native areas here in the Truckee basin, as well as monitoring Cui-ui. So, you know, being able to get the hatchery side and the field research side is just amazing. And I think that's what really kept me here for so long is you'll never get bored. It's there's so much going on all the time.

27:14
Do we have any kind of historical accounts of numbers of Cui-uis or Lahontans or kind of what the system was like before some of these water diversions and different things started happening? Like just like, Yeah, I'm curious what it was like, if you could go there back in time, what would you see, like just mass wise?

27:31
Yeah, if you could go back in time to see Pyramid Lake and looking at the Lahontan cutthroat trout and like Cui-ui. I would say that it would be a very lush area, lots of food, lots of water. Pyramid Lake would be very full, you would have massive - millions, I would say, of Cui-ui running most years, instead of, you know, only on good water years that we see now. Lahontan cutthroat trout would also be migrating all the way up towards Tahoe and into those tributaries, it would just be a very interconnected system that would seem very healthy. That's kind of how I would picture it in my head.

28:09
Do you have that in your mind when you're kind of thinking about the future of your work and recovering this fish? Like, I guess, what does recovery look like? And kind of where do you think we might be able to get in the future?

28:22
I would think in my mind, I mean, recovery would be getting an adequate water supply for Pyramid Lake and the fishes of that lake, you know, we ultimately would really want to bring up the elevation of Pyramid Lake. So really, the delta isn't an issue. And we wouldn't even need to run Marble Bluff as much as I like to operate that lift, you know, having the lake at an elevation where that area is not an issue which was caused by that, you know, completion of Derby dam in 1905. Having that elevation up, having good adequate access to the Truckee River would just allow, you know, year after year of good spawning, and good shoreline habitat for other fishes of Pyramid Lake as well, that spawn in the lake, that would be the best benefit for the fish.

29:09
The best scenario.

29:10
It has been a few years since there has been a real deep dive into Cui-ui population numbers, how they utilize the Truckee River. And the Truckee River is changing. So, you know, we have the removal of dams or the retrofitting of fish passage on dams to improve their access to the river.

29:31
Do you recall back in 2007, when you first got into, you know, western Nevada, the first time you came across a Cui-ui and how you felt?

29:40
Yeah, I felt almost kind of nostalgic. I mean, it's such a very old, long live fish. I've never worked with a sucker species before. I had only worked with bull trout and redband trout prior to this in Oregon, so coming down here and seeing the Lahontan cutthroat trout and then seeing Cui-ui, Cui-ui just kind of blew my mind with their ability to be resilient to just overcome any obstacle. I mean, they will go into the Truckee River, if they need to really spawn they can, you know, they pick up on these cues to come in. They're hardy fish, long live fish, you know, 50 plus yours hasn't been documented. So yeah. And I think their longevity is attributed to the fact that they know when to enter a system and when not to, so they don't need to reproduce every year, they can stay in the lake and wait for the next system. They've kind of evolved with these drought scenarios. And I thought that was amazing. That was so cool that the fish really queued in on its environment and was able to, you know, sustain itself in this one lake in the entire world and this one water system, and come out, you know, still be there. I mean, from Pleistocene, you know, glacial lake Lahontan five to 10,000 years ago. So I mean, that's just amazing.

30:58
There's so many cool suckers. And yeah, we've talked about a bunch on this show. Now, it might seem like we're over covering them. But yeah, each one we learn about, like, they're, they can be really big. They're beautiful. They're Yeah, like you said, resilient. That's super cool. I'm curious if someone's fishing for a Lahontan cutthroat trout, they're using a small fly, is there any chance of catching one of these fish? And if so, what do you do? This is an endangered species? How do you handle it? Is this even a thing?

31:23
Yes, that is a thing. So just to kind of show how the fish would respond when you might interact with a fish, if you were to potentially catch one would be in the spring, when they're congregating in front of the Truckee River to mate in the lake to make sure that the conditions are right to enter the Truckee, that's when you'd have the most likelihood to catch one. Because all the fish would basically be on that one south end of the lake waiting for that. And the cutthroat trout are going to be perusing the shoreline looking for food, and you're going to be out there fly fishing, or with a lure. I've caught them both ways. But if you do happen to hook one, then they can actively go after a fly, we've seen it and fishermen have reported it, you would just quickly is and as effectively as you can just unhook them and release them. And then you are perfectly fine for that. And there are regulations in place within Pyramid Lake that require barbless hooks. So it makes taking the hook out much easier. And you know, less damaging to the fish. And it does happen quite often during the spring. But fishermen catching Cui-ui by chance and telling us about it actually kind of help us understand that Cui-ui are congregating. They are

there they are ready. You know, it's kind of a cue for us as well. So we take everything into account every spring when we're looking to see if we were going to spawn.

32:47
So don't be nervous if you catch one to report it.

32:49
I wouldn't be nervous if that happens a lot. But just be as diligent as you can to get them in and to unhook them and release them as quickly as possible.

32:58
Say I'm coming in to Reno gonna be visiting? Is there anything you'd recommend where I could like go see these fish? Or can I see these facilities or what's the kind of public viewing opportunities if any for this fish?

33:12
As you're entering Reno, the best way to see these fish would be in the springtime can go as late as June, but usually starting in March and April. And you can see them out at Pyramid Lake, especially at Marble Bluff fish passage facility, which is located three miles up the Truckee River from Pyramid Lake.

33:31
It's a public facility?

33:32
It is a public facility, we give tours all the time, you can schedule one, and you also can just drop by freely. And if we're open, which is usually Monday through Friday, about eight to three or so. And the gates are open. You're welcome to stop in for a tour.

33:49
Why should people care about this fish who are I guess both from the area and outside of the area?

33:57
Oh it's such a prehistoric fish. It is been here for so long. And the fact that it is been able to stay here so long, and adapt to all the changing river and lake environments is just amazing. So the conservation of the species should be you know, number one, and that's why it's listed as a as an endangered species. So I think it's a beautiful fish. It's a beautiful, unique area. You know, terminal lakes are hard to find. There's a bunch in Nevada, Walker Lake being one Pyramid Lake being another and because they're so unique seeing and being able to work with a fish species that lives and calls that terminal lake home is just amazing. It's really nowhere else nowhere else in the world so they can't go away. And so we got to just protect their home the best we can.

34:47
All right, Erik. Well, thanks for joining us. It's been great having you on!

34:50
No problem guys. Thank you for your time and thank you for including myself and Cui-ui.

34:55
Yeah. All right. Get out there and enjoy all the fish especially the Cui-ui

35:04
Thanks for listening the fish of the week. My name is Katrina Liebich. And my co host is Guy Eroh, Our production partner for this series is Citizen Racecar produced and story edited by Tasha AF Lemley, Production management by Gabriela Montequin. Post production by Alex Brower. Fish of the Week is a production of the US Fish and Wildlife Service, Alaska Regional Office of External Affairs. We honor thank and celebrate the whole community, individual tribes states, our sister agencies, fish enthusiast, scientists and others who have elevated our understanding and love as people and professionals of all the fish.