

Pyramid Lake Federally Recognized Tribe Extension Program Ripple Effects Mapping Findings

The Indian Land Tenure Foundation (ILTF) engaged in a joint collaboration with an evaluation team and the Western Extension Risk Management Education Center to measure the long-term impacts of the Federally Recognized Tribal Extension Program (FRTEP) serving the Pyramid Lake Tribe. In order to collect this information, the evaluation team used a tool called Ripple Effects Mapping (REM). REM is a storytelling technique that is used to collect stories and experiences from community members. The results at the completion of a Ripple Effects Mapping included both a visual map and a set of narratives that were subsequently analyzed.

The data from 31 FRTEP programs was summarized into a final report – *“Mapping FRTEP Impacts in Indian Country”* and published in March 2022 for the purpose of demonstrating the collective value of the programs. This report can be found [Measuring FRTEP’s success - Tribal Extension](#)

In June 2021, a virtual Ripple Effects Mapping event was held with Pyramid Lake Tribal members and others in the community who benefited from FRTEP programs or were aware of the impact of this programming. Those participating in the online event may have included farmers/ranchers, community members including agency and/or Tribal leadership, high school students, 4-H members, and others. Tribal and community members joined either online or by phone.

During the session, participants had the opportunity to tell us stories about how they have benefited from having FRTEP in their community. A facilitator led the conversation, asking each Tribal and/or community member to share their story one at a time. Questions participants were asked to consider included:

1. *Tell us a story about how one of these programs has had an impact on your tribal community.*
2. *Are you or your family doing anything differently as a result of these programs?*
3. *What has been a personal benefit to you or your family because of these programs?*
4. *What has been the most helpful part of these programs for you, your family, or your tribal community?*

As individuals spoke, their stories were both recorded and mapped into digital mapping software in order to visually display the impact. No individual’s names are included in this data set or the final report mentioned above. Following the REM, those stories were analyzed using the FRTEP priority program areas to determine the ways in which the FRTEP has impacted the Tribe and surrounding community. Additionally, the data was also analyzed to understand ways in which the COVID-19 pandemic has had an impact on programming.

This report includes all of the stories collected from the Pyramid Lake Tribe.

- Page 2 shows examples of ways you can use this information.
- Page 3 summarizes in themes and subthemes the ways in which the FRTEP program and you as the FRTEP educator/agent had impact in your tribal community.
- Pages 4-11 includes these themes and all of the stories collected from your REM event.
- Page 12 is an image of the full REM Map, which is also attached as a PDF for reprinting. Additionally, a laminated poster of your REM MAP is being mailed to you, to share with community members, Tribal leaders and others vested in your programs.

If you would like to have an opportunity to discuss in further detail and/or have questions, we can set up a Zoom meeting with one of the Ripple Effects Mapping team members.

Rebecca Sero, r.sero@outlook.com;

Debra Hansen, debra.ann.hansen@gmail.com; and

JoAnn Warner, warnerj@wsu.edu

How you can use your Ripple Effects Mapping data:

Storytelling is a powerful technique that can be used in many different ways. Your stories from REM helped us understand the impacts and value of FRTEP that can be shared with funders, Tribal members and leadership. More than numbers, stories can reveal needs, achievements and emotional real-life impacts. Your story examples can be used multiple ways to elevate the importance of the work that you are doing and to demonstrate the collective impact that it is having in your community.

Here are three ways you can use the two edited story examples (below) while also utilizing the report's themes and subthemes to demonstrate the impacts this program is having:

Within the Community

- Stories can be shared or incorporated into community celebrations and/or events.
- Communicated to your Advisory Committee to help build capacity for future programming.

In Reports

- Prepared reports Tribal Council members and other community leaders with story examples, themes and subthemes that show how FRTEP is working to accomplish the priority areas established by the Tribal Advisory Council; and which relay the benefits, impacts and other indicators of success as a result of FRTEP.
- Prepared reports for your 1862 Land Grant University or your 1994 Tribal College or University leadership with story examples embedded and that include the themes and sub themes from each of the program's priority areas. Highlight how the Ripple Effects Mapping session empowered community members to share their stories and the benefits inherent in discovering the successes brought about by the program.

In Grant Applications

- Having a solid evaluation plan is critical to writing a successful grant application. Including outcomes from the Ripple Effects Mapping demonstrates the long-lasting impacts of FRTEP and uses a culturally appropriate approach to do so.

In summary, the stories and data that you have collected through the Ripple mapping process can be used many different ways to communicate your successes and to elevate your program not only at the community level – but also to your stakeholder partners, collaborators and other individuals, organizations and entities, for the purpose of strengthening and building the capacity of FRTEP.

Themes and Subthemes

For the Pyramid Lake Tribe and community, the impacts, effects, and benefits could all be found within the following five program priority areas and subthemes are listed here. On pages 4-11, you will see the same priority areas, subthemes with individual stories collected directly from the transcript.

1. Indigenous Food Systems for Food Security, Food Safety and Obesity Reduction

- Adult Involvement
- Community Involvement
- Family Involvement
- Healthy Food Choices
- Traditional foods
- Youth Involvement
- Barriers

2. Natural Resource Conservation and Bio-energy Development

- Tribal Connection to Land

3. Tribal Youth and 4-H

- Social Connections & Community Engagement

Response to COVID

- Adaptation of Programs and Services

Overall

- Responsive to Community Needs

Themes, Subthemes and Stories

Theme	Subtheme	Statement
Indigenous Food Systems for Food Security, Food Safety and Obesity Reduction	Adult Involvement	Our hoop house was built last year. It sat pretty much throughout the winter. The location with where we placed it, it was right over one of my water lines and so I was able to dig and connect a yard hydrant inside my hoop house. I have a yard hydrant inside my hoop house, which is useful. It's helpful... [The FRTEP agent] helped me with one and I built two more for the front...
Indigenous Food Systems for Food Security, Food Safety and Obesity Reduction	Community Involvement	Without the FRTEP program, none of this would have happened. It was a new concept that originally the hoop houses came in from Utah state and they had a cheap one that they built out of PVC. We tried it on each of the reservations just to introduce the concept and now it's grown to what it's grown. I did not want to leave the program to where we had a bunch of hoop houses, PVC scattered all over the reservation. We needed something that would stand up and this is what we came up with, and it has been working. Like I was saying before, the FRTEP program before included the Duck Valley, Walker River and Pyramid Lake. Then at the last funding applications that we put in, we had the opportunity to apply for one for each one. Through this, we've been able to do a lot more.
Indigenous Food Systems for Food Security, Food Safety and Obesity Reduction	Family Involvement	My daughter, she actually did the Veggie for Kids and she liked that. She tried out new vegetables that they did grow there. Then she came home and said we had to start recycling and all of those things that she is that she was taught in for the Veggie for Kids. [The instructor is] going to get them all composting. We'll have composting kings and queens, and people running all over the reservation. That's great. I love that. Come home and tell you got to start recycling. Both programs really affected my immediate family. We really benefited from them.
Indigenous Food Systems for Food Security, Food Safety and Obesity Reduction	Family Involvement	The whole family has been involved in the hoop house, really. My granddaughter likes to come out and help me with the gardening. My husband comes out and he just can't believe the growth of the plants. He actually ate as zucchini. I couldn't believe it. My granddaughter has a strawberry garden over here. She has a little strawberry garden over here. It's not growing any strawberries, but it keeps growing leaves, but she loves it. The tomatoes are finally starting to bloom and get red, and so it's exciting. We have 36 corn growing outside.

Theme	Subtheme	Statement
Indigenous Food Systems for Food Security, Food Safety and Obesity Reduction	Healthy Food Choices	It's made me lose about 10 pounds. It's a lot of hard work. You just feel good, actually growing your own food and doing something. It actually got us more involved in composting, doing things for ourselves.
Indigenous Food Systems for Food Security, Food Safety and Obesity Reduction	Youth Involvement	We grew different food each year. I grow food and we try to plant in the spring where it grows in the summer. Then in the fall, the students come in and they got food. They get to learn how to cook and make stuff with, and then grow some stuff in the winter. Then it just goes around. They've made different kinds of foods. When they grew just lettuce, they love just eating lettuce without salad dressing because it was so fresh. They just ate right from the vine, the tomatoes and things like that. We've also made ketchup. I try to teach them different ways of cooking, like healthier ketchup because ketchup is full of sugar. I [teach them] to use the foods to cook healthier and look at how they eat.
Indigenous Food Systems for Food Security, Food Safety and Obesity Reduction	Youth involvement	Salmonberries and thimbleberries are the berries we got because I was over on the coast and I always dig up plants and bring them over here to grow. I'm going to talk about the high school... I was one of the first got the early hoop houses that had the PVC and grew in that with our students. It did blow over and it was devastating. The students, they're watching it and were very upset. They were very into the hoop house, very invested in their time and stuff in it. It's something that was very important to them. They've always been part of building it and they helped build the one in [other town] and that's always good because then they get that hands-on participation in it.
Indigenous Food Systems for Food Security, Food Safety and Obesity Reduction	Youth Involvement	One of the things that's great about having the students learn how to plant seeds because some of them have gardens, but the majority of our students have never planted a seed before so they don't even know how to plant seeds, even though they're high school. It's great to see them enjoy planting, watching their stuff grow. We do different things on water and talking to plants, the differences. We look at different studies on how your voice affects plants and things like that. They do go out and play music to some of their plants sometimes. They really get invested in their plants.

Theme	Subtheme	Statement
Indigenous Food Systems for Food Security, Food Safety and Obesity Reduction	Youth Involvement	I want to expand it out that way with our students, each year, they get a project they'll do something in the hoop house, but with COVID, it really set down everything so I've just been growing stuff inside. I do have stuff that grows all year. Even in the winter, I have the Mormon tea, rosemary. I got some plants that will grow all year round and so I just go in and maintain them. We do a lot of fun things with it. What's really good about this is that our school, we have students from all over. They come from Pyramid Lake, but they also come from other areas. We're planting seeds out all over so they get that interest in planting food. I always have at least one student come back and say, "Oh, [name] I'm growing kale, or I'm growing broccoli." I had a student try to grow something in the winter this last time when we were at home and he was showing me his plants. That's what I get excited about when I see that they're taking what they learn and they go on with it.
Indigenous Food Systems for Food Security, Food Safety and Obesity Reduction	Youth Involvement	I start the kids out at kindergarten. It's exciting to see at the beginning of the year, I go around the room and who are you, and what's your favorite color and stuff like that. Eventually, we get to what your favorite food? At the beginning of the year, it's always pizza, or Taco Bell or chicken nuggets, or McDonald's or something like that. Then after veggies for kids comes along, they change it. Then they decide that, oh, they like watermelon or they like blueberries, or they like raspberries or no, I want carrots. They change their thought processes to actually wanting to eat more healthy food and that's the exciting part for me.
Indigenous Food Systems for Food Security, Food Safety and Obesity Reduction	Youth Involvement	I wanted my students to learn how to do pruning of the trees, so [the FRTEP agent] arranged a workshop through UNR to have someone come and teach how to do tree pruning. We do try to utilize those services when we can.
Indigenous Food Systems for Food Security, Food Safety and Obesity Reduction	Youth Involvement	One of the things from the hoop house, it expanded to where now I'm trying to do a traditional foods garden on our grounds. Every year, we've done different things in the area. We get a rain catcher. The students built a rain catcher. They built a compost with pallets. It's been hard because we plant choke cherry, buckberry, elderberry. We plant them, but it's been really hard to get them to stake, again because of the soil, but this year we're actually going to get a water line because I've had to hand water in the summer, but now we're going to get a water line over there so we'll get more stability with our plants that we're able to grow there. The idea is that the students can learn how to identify the plants in the garden so when they go out into nature, they can

Theme	Subtheme	Statement
		<p>know how to identify correctly, traditional foods and plants. Then we can learn how to use them within the class, if it's making syrups or there's different medicine balms you can make and things like that.</p>
<p>Indigenous Food Systems for Food Security, Food Safety and Obesity Reduction</p>	<p>Youth Involvement</p>	<p>[The FRTERP agent] got [the students] the stronger hoop house. I probably do need to get the shade too because it does get hot. I just haven't done that yet because I do keep it vented a lot and everything. We got a new one and like I said, we do try to do a lot of native seeds from that native seeds program and foods that they'll get to eat. I tell them they can grow anywhere. Even if they don't have a big yard, they can do the containers and grow.</p>
<p>Indigenous Food Systems for Food Security, Food Safety and Obesity Reduction</p>	<p>Youth Involvement</p>	<p>Then he also pushes water on them and I'm a big proponent of you guys you need to drink lots of water because a lot of people don't drink enough water. He gives everybody water bottles. We fill them all up every day. This last year, he brought lemons, and oranges, and cucumbers. For two weeks, the kids were all excited about having spa water. We would add a little cucumber to each bottle. Some of them were like, "I want to try this one. Can I dump this out and try a different one?" They were all excited about drinking the different kinds of waters and stuff like that. It's just to see them wanting more healthy food. [FRTEP agent] came this year, but it was right at the end of the year because of all the coronavirus stuff. Normally, he would come once a week and then, but this year he came every day for a couple of weeks because we had to get it in right at the end of the year because they didn't let him in until towards the end of the school year.</p>
<p>Indigenous Food Systems for Food Security, Food Safety and Obesity Reduction</p>	<p>Youth Involvement</p>	<p>I did get into the hoop house program last year and with COVID, that put a damper on learning about the soil, what type of food grows up here in Nevada? That was not good because I was going in there, didn't know anything, but getting the hoop house, that has been an eye-opener to me, to my whole family. Not only my immediate family, but my dad has helped a lot and my cousin has helped me a lot also, my aunts. It's just really interesting to see everything that we have been able to do in our hoop house. We always have eaten vegetables, but my daughter loves strawberries. She wanted strawberries and so now she's getting them. They don't even make it to the house. She's washing them before they can go into the house. My son, he wasn't too keen about getting the hoop house because of all the work that we had to put into it, but now he's the main one. Gets up in the morning to water. I think he was surprised at how much</p>

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		<p>vegetables that we've gotten already... cilantro, spinach, lettuce. Zucchini, strawberries, and then our bell peppers and jalapenos are starting to come up. The tomatoes are getting there also, but I think just seeing the difference. He does like vegetables though, so that wasn't a problem getting him that. Starting from the very beginning where they were just seeds to now where they're actually full-blown plants that are producing the vegetables.</p>
<p>Indigenous Food Systems for Food Security, Food Safety and Obesity Reduction</p>	<p>Barriers</p>	<p>I'm really appreciative of the material that this hoop house was built. When [the FRTEP agent] was talking about the early program that started out here, we started with PVC pipe. I purchased a PVC pipe hoop house and at about the same time they put the ones up here, I put one in my backyard. That November, I was on travel. I was not home and we got a big windstorm and it took them all apart. When they did get the better material for the two hoop houses here in the community, I kind of envied it but at the same time, it was just a matter of time before a program like this happened. I just said, "Yes, I would like to get one of those." I think when it comes to resources, like it was mentioned earlier, the need for funding, if we can get funding to support the more sturdy hoop houses, that's what we need out here because of the winds.</p>
<p>Natural Resource Conservation and Bio-energy Development</p>	<p>Tribal Connection to Land</p>	<p>I did buy myself a pH and moisture meter because my some of my soil in the front here is really high in phosphorus and really hard-packed, but in the back right next to my field, it's really nice soil, good clay-based soil. The importance of soil quality is one that I think people need to appreciate. took engineering when I was in college in my undergrad studies and my roommates used to tease me because I'd tell them I got to go to soils. I got to go to my soils class. They'd all start laughing at me and say, "Oh, what are you going to do? Learn about dirt?" They would just never give me a break.</p>
<p>Natural Resource Conservation and Bio-energy Development</p>	<p>Tribal Connection to Land</p>	<p>I think now when you really think about it, no matter where you're at and the way I think about agriculture, and as much as the water right battles that we've been in have ensued people talk about... Like over in [other area], we've had a big water right battle for a hundred years with those guys. I get along with all of them, the TCID board of directors and we have more in common here than people think. I remember our attorney kept telling us that agriculture, it's over with. It's the end of agriculture. We have to get the canal shut off. We got to fight harder for our water rights, but the way I look at it is agriculture is the future.</p>

Theme	Subtheme	Statement
Natural Resource Conservation and Bio-energy Development	Tribal Connection to Land	I had a discussion with our tribal council at one point where they wanted to try to use some of our decreed water rights for industrial development. I said, “No, people are going to get hungry and they’re going to eat. What are they going to eat? They’re going to eat food. They’re going to eat something grown from the ground. Something that’s produced from the ground, whether it’s a crop that you feed to animals and then the meat is on the table, or it’s a vegetable crop that you’re going to put on the table.” No matter where you go, what you do, agriculture’s always going to be at the foundation of life because we’re dependent on it. When it comes to soils, you got to have good quality soils in order to grow your vegetables, grow your crops.
Natural Resource Conservation and Bio-energy Development	Tribal Connection to Land	I’ve been reading up more on composting. I’ve become more inclined to learn about composting. I got compost out back and, of course, I’ve got my corral over here with a couple of steers that get the manure. I have a smaller woodchipper that I’ve been putting all of that stuff in. I’ve just been mixing it all together. I did provide some of it to my sister and to a friend of hers, hopefully at some point, because I got a big pile of old hay out back too that I’d like to compost it, but if I can make enough of this compost to where compost becomes part of the production of what we do here, then I would like to show more people how to compost because we have a lot of ag lands out here. A lot of fields that grow and I’m sure a lot of old hay that’s laying out back in the hay yard that could be used for composting. I’m hopeful that as we get through this program and the programming, that all of us, the whole community could learn more about soils and what we can do to make our soils more fertile.
Tribal Youth and 4-H	Social Connections & Community Engagement	My son is 16 right now, but he was in the [local horse riding] program, which was several youth kids from the reservation. Next to the clinic, they had a garden for the elders. They went and they cleaned that all up. They went to the lake and they did some exercises online, I believe, but he really enjoyed it. He was paired with another student from the reservation. I mean, he enjoyed doing the little stuff that they had to do. They went to the park, I believe too and cleaned that. They just did little events around the reservation to help the whole community, not just specifically for themselves.
Response to COVID	Adaptation of Programs and Services	With the COVID, it was just the hoop house at that time. Right now, everything has just been on YouTube and I've just been learning that way. Every plant that I get... I don't want

Theme	Subtheme	Statement
		to have any vegetables or any plants in my hoop house that I don't eat myself, like rhubarbs and stuff like that, I don't eat them. I've only had stuff in my garden that I actually eat. I could research them and then find out.
Response to COVID	Adaptation of Programs and Services	I want to redirect it to more teas because prior to COVID, I was trying to focus on certain plants and it came to be because a lot of teas are what have people been using with COVID and healing. I want to focus on different types of teas in the hoop house, where the students can learn how to grow them and then we can give back to the community and give them out to the community.
Overall	Responsive to Community Needs	FRTEP gives us the contact base. As programs come about, we can go to the tribes and say, "Do you guys want to participate in this? Do you not?" A lot of things at the university, they don't know who to contact at the tribes or anything. The FRTEP program is the basis for getting new funding and adopting new programs and concepts. That's what we're after. Another thing, too, is we provide a pretty big effort with promoting USDA programs on the reservations. When I first came in, there was very little of this going on so that was our big push, that we use the EQIP programs and farm service agency. We had workshops and presentations by those, so people became familiar with what's available and a lot of them have used it.
Overall	Responsive to Community Needs	FRTEP was instrumental in bridging those USDA programs so you could access those programs more and learn about them. We actually helped him do the applications if they wanted to because a lot of the programs, especially with the EQIP ones, you can apply for them. NRCS gives them to you and then you're left alone on the implementation. That was a part that was causing quite a few projects to fail and things like that, and NRCS wasn't happy. Each of the producers weren't happy either, so it was just learning the concept and how to go about doing it. That's what our program provided. Along that, with the tax issues that I mentioned before with Keepseagle and now with the new FSA loan program for disadvantaged farmers. Basically, without the FRTEP program, additional funding opportunities like this would not be available. FRTEP program ties in the university with this. If we come in to have issues or something, we can go to different departments within the university and say, "Okay, we need help on this."

Theme	Subtheme	Statement
Overall	Responsive to Community Needs	People contact [the FRTEP agent], "I have this problem." [and the agent] can go to the university and say, "Okay, where can I find some expertise to help address this issue?" Within the university, we can do that, especially with the College of Ag.
Overall	Responsive to Community Needs	We had plastic PVC hoop houses, those didn't work so we stuck around until we got the better ones. We got metal frames and a thicker plastic. That's what we went to.

