## GOLD KING MINE Focus group update: Shiprock preliminary results



### DECEMBER 2016

- Focus Group Overview -Focus Group Dates: May 13, 2016 (2 groups) May 16, 2016 (1 group) Location: Shiprock Chapter House Total Participants: 34 \* Results based on 3 of 6 focus groups

# TÓŁÍTSO, THE WATER IS YELLOW:

Investigating short term exposure and risk perception of Navajo Communities to the Gold King Mine Spill – Upper Fruitland, NM, Shiprock, NM and Aneth, UT –

**Introduction:** This update addresses Aim 3 of the "Tó'łítso: The Water is Yellow" project (see text box). As of December 2016, three of the six Shiprock focus groups have been analyzed and are summarized in this update. The 3 remaining focus groups are currently being translated from Diné'ke'jí to English.

**Focus Group Overview:** Two of the focus groups took place on May 13, 2016 and the other group was on May 16, 2016. There was a total of 34 participants:



### Focus Group Questions:

Participants were asked questions about their use of the river before the spill, after the spill, and their future vision for the river. A list of focus group questions is attached.

**Focus Group Analysis:** All focus groups were facilitated by a Diné facilitator and 1-2 "notetakers." University of Arizona (UA) students transcribed the focus group responses based on recordings and notes. Dr. Manley Begay (Northern Arizona University, NAU) and Al Yazzie (UA) translated from Diné'ke'jí to English. The Tó'łítso project team, consisting of UA, NAU, and Fort Lewis College faculty and students, identified 19 "themes" using NVivo qualitative analysis software (cont'd on page 2).

#### Tó'lítso Project Aim 3:

Determine what people think are the risks in using the river after the spill and measuring the risk based on the environmental and household samples.

May 13-22 & June 15-17: We conducted 12 focus groups: 4 in Upper Fruitland; 6 in Shiprock; and 2 in Aneth. There were 123 total participants. We asked participants how they used the river before the spill, how the spill impacted them, and what they think about the river's future.

**To Date:** About 75% of audio was written down word for word, and 50 hours of audio needs to be translated from Diné'ke'jí to English.

Perceived Risk	Behavior Changes	Other
Environmental	Farming	Future Visions
		for Change
Cultural	Ranching	Sediment
		Exposure
		Pathways
Spiritual	Spiritual	Pre-existing
		Contamination
Mental	Cultural	
Health	Mental Health	
Financial	Recreational	
Distrust		
Historical Trauma		
Subsistence		
(Food Loss)		

#### FOCUS GROUP THEMES

**Focus Group Themes:** Themes, or topics that were mentioned repeatedly, were identified by 8 - 10 Tó'łítso project team members, including Diné students, across multiple rounds of coding and discussion meetings. Some comments had overlapping themes and were coded in more than one place. Since focus groups are still being translated and have yet to be analyzed, the final list of themes may change.

#### Perceived Risk Theme Definitions

Environmental Risk: Risk of contamination as direct result of spill. Cultural Risk: Risk of identity loss, disruption to family unit, disruption to cultural or community pride, loss of river use for cultural purposes. Spiritual Risk: Risk of loss of spiritual practices. Mental Risk: Risk for mental health effects. Health Risk: Health concerns resulting from spill. Financial Risk: Risk of income loss. Distrust Risk: Risk of continued

distrust of government, discrimination, and lack of communication between agencies. *Historical Trauma Risk:* Risk of increasing historical trauma. *Subsistence Risk:* Risk of food loss or less food security.

#### **Behavior Change and Other Theme Definitions**

*Farming:* People changed how they farm. *Ranching:* Agriculture and livestock affected. *Spiritual and Cultural:* Spiritual and cultural practices affected. *Mental Health:* Mental health affected (i.e. sadness, anger). *Recreational:* Less use of river for recreational purposes. *Future Visions for Change:* Discussion pertaining to the future, next steps, or alternatives. *Sediment Exposure Pathways:* Exposure to contaminants through water, animals who drink from river, etc. *Pre-existing contamination:* Discussion of previous river contamination (i.e. dumping of "sewer water" into river, run-off from other mines).



## SUMMARY:

The most highly commented theme (24 references) was **future visions for change**. Comments included:

- Utilize the Navajo Agricultural Products Industry (NAPI) Cutter Dam water
- Pursue compensation to assist with costs to haul water or to use "drip water" temporarily
- Pursue sustainable alternatives like hydroponic farming, solar power to clean the water, and reverse osmosis or "Brita" filtering systems
- Need for a unified "voice" among the community

The next biggest theme was **health risk** (21 references). Participants were concerned about:

- Personal and family health: Will eating the crops cause them health problems? Will letting their grandchildren play in the field make them ill?
- Community health: Will selling their crops "poison" others?
- Birth defects
- Cancer
- Mental health
- Animal and livestock health: Will eating their sheep make them ill?

Another main theme was **distrust risk** (21 references). Participant reason for distrust were:

- The City of Farmington has previously dumped sewage waste in the river
- The federal government has "lied" about uranium and fertilizer safety in the past
- The Environmental Protection Agency (EPA) has not taken responsibility for the spill
- The Navajo Nation government has previously supported fossil fuel industries and has not spent money from the multimillion dollar settlement towards spill clean-up

Perceived **cultural risk** (15 references) included:

- Loss of community identity since they can no longer farm
- Damaged community reputation due to spill (no one will buy crops from them)
- Community is conflicted on next steps (increased tension)
- The next generation will not be able to farm (disruption to K'e and community farming culture)
- People have stopped using the

river to harvest tadidiin and to wash off after sweat lodge

Behavioral health programs have stopped taking kids to the river to discuss cultural teachings

**Farming changes** (14 references) were also linked to **financial risk** (5 references):

- Did not farm after the spill (loss of income)
- Farmed less land (loss of income)
- Farmed for family (not to sell)
- Hauled water or used tap water

Environmental risk (11

references) included:

- Concern about heavy metals still in sediment
- EPA representative said on the news that the water is still contaminated
- ASU professor said water will "not be good for a decade"
- Concerns about long-term presence of contaminants in the sediment and the canals
- Rain brings "grey" water, is there sediment with heavy metals in there?

## WHAT'S NEXT?

- Winter/Spring 2017: Finish translation and analysis of remaining focus groups
- Confirm focus group themes for final report
- Summer 2017: Draft reports for communities and submit for approval
- Fall 2017-Spring 2018: Disseminate results to communities