HÓZHÓÓGO NA'ADÁ ASSESSMENT REGARDING LOCAL FRACKING AND DRILLING OPERATIONS, EASTERN NAVAJO AGENCY - A WORKING DRAFT / FIRST REPORT



A First Report of Hózhóógó na'adá Assessment Conducted October 27. 2016 at Counselor Chapter Regarding Natural Resource Development and Fracking

Dr. Herbert Benally, Facilitator and Writer, hjbenally446@gmail.com, with Dr. Larry W. Emerson. emerson714@gmail.com, Observer and Writer

April 28, 2017

TABLE OF CONTENTS

| TABLE OF CONTENTS2 |
|----------------------------------------|
| OVERVIEW AND BACKGROUND3 |
| PARTICIPANTS3 |
| DESCRIPTION OF HÓZHÓGO NA'ADÁ PROCESS4 |
| METHODOLOGY4 |
| FINDINGS: THE PARTICIPANTS SPEAK6 |
| OBSERVATIONS13 |
| FOLLOW UP ASSESSMENT16 |
| BIBI IOGRAPHY18 |

OVERVIEW AND BACKGROUND

The Hózhóógó na'adá assessment model and process, developed in 2008 by Dr. Herbert Benally (H. J. Benally, 2008), was initiated on October 27, 2016 at the Counselor Chapter to assess the following concerns:

- to initiate a Diné-centered social science assessment process that would yield data regarding how impacted community members view natural resource development, primarily fracking, from a Diné traditional knowledge lens and perspective.
- to document impacted community views of issues from a Diné traditional knowledge viewpoint.
- 3. to develop a community survey, based on views of participants, to be administered at later date, to assess a wider community view of natural resource development of which fracking is a main issue.
- 4. to ascertain further follow up assessments, employing Dr. Benally's research regarding a Diné-based methodology, namely a community survey based on participant concerns derived from the Counselor Chapter discussions.

Dr. Benally's Hózhóógó na'adá model was previously assessed in 2015 to gain insight from Shiprock area Diné service providers regarding the meaning and significance of the model (Emerson, 2015)

Finally, in Dr. Benally's model was again used to gain insight into the question: what happens when participants view Navajo food policy when examining the issue through a Diné traditional knowledge lens? (L. W. E. a. H. Benally, 2015)

PARTICIPANTS

On October 27, 2016, Dr. Herbert Benally facilitated a five (5) hour session to an average of 13 Diné community members from Counselor Chapter (8 participants), Torreon / Star Lake (2 participants) and four (4) other members who did not designate their Chapter affiliation.

Five (5) participants were between ages of 41-50, four (4) were between ages of 51-60, two (2) between 26-40 and one (1) aged 15-25 and one (1) more age 61+.

DESCRIPTION OF HÓZHÓGO NA'ADÁ PROCESS

The Hózhóógó na'adá four areas of knowledge (Herbert John Benally 2008) - bik'ehgo da'iinaanii doo nitsahakees (knowledge which gives direction, thought), nihigaal at'iis (sustanance and physicality), aha'ana'oo'niił doo áni' (gathering of family, mind/emotion), sihasin ha'ayii doo holdilzin (rest and reverence for creation, environment) offer Diné a holistic, moral, harmonious and balanced way to assess personal, interpersonal, intrapersonal, family, clan and community-centered understandings of social, political and economic condition.

Hozhóógó na'adá is a process or a methodology whose origins come from ways Diné elders and medicine people reason out social, economic and political conditions always being influenced and guided by the four areas of knowledge to derive a sense of harmony, balance and wellbeing.

In conducting his research, Dr. Benally also derived a way elders and medicine people "reason out" life ways. Dr. Benally expresses this "reasoning out" process as a methodology that can be used as research or evaluation methodology and calls the process Nabik'i' tsáhákees (Herbert John Benally 2008) or a way to reflect and process the application aspects of ceremony. Nabik'i tsáhákees includes space for data gathering regarding what is known, reflection and data analysis, formulating questions or new assumptions, presentation of assumptions for validation and finding truths via teachings.

METHODOLOGY

Two evaluators met with leaders and communities members from the Eastern Navajo Agency on October 27, 2016 to document, via a facilitation method, community issues regarding drilling and fracking operations.

To comply with Navajo holistic philosophy of a balanced life, the evaluators employed Hozhoogo Na'adah a Diné-centered traditional research model.

Before the community hearing, the participating communities members according to tradition introduce themselves by their clans. This introduction enabled the participants to address other members according to the clans system and know what community they were from. The reader should note that such introductions left participants open to more intimate kinship relations and dialogue.

After this courtesy, the participants received an orientated to the framework of the Hozhoogo Na'adah research model and a discussion of the open-ended questions previously prepared.

The questions were:

- 1. Bik'ehgo Da'iináanii (Spiritual values, moral and ethic that guide individual, community): Community concerns over land and spirituality of the people.
 - a. In the areas where drilling and fracking are operating, are there sacred sites, burial sites and other areas that are sacred that the operation has affected?
 - b. Navajo believe in a mutual and reciprocal relation with all life in their environment. How has fracking affected the people in your communities?
 - c. How do these operations affect the psychology of the people?
- 2. Nihigáál (Sustenance and health): Communities Concern over land and their basic economy and health.
 - a. How is the drilling and fracking operation interfering, hindering or distorting Navajo land use?
 - b. How is fracking affecting the individual and community health?
- 3. Áha'aná'o'nííł (K'e, family, community relationship): Concern for the changing social dynamics caused by the oil companies.
 - a. How is fracking operation affecting the social dynamic health in your communities?
 - b. How is fracking in your areas disrupting the integral k'e systems within your community?
- 4. Hodílzin (reverence for home and environment): Concern for Land, water, air, home and environment.
 - a. How is fracking affecting the Land, water, and air quality?
 - b. How is fracking affecting the domestic and wild life?

These questions were poised to the communities and with additional discussion and clarification, the communities shared their experience with oil companies drilling and fracking.

FINDINGS: THE PARTICIPANTS SPEAK

After conducting a thematic analysis, the following themes emerged and are based on frequency of references.



| THEMATIC ANALYSIS SUMMARY OF PARTICIPANT CONCERNS | | |
|------------------------------------------------------|-------------------------|--|
| Generalized themes | Frequency of references | |
| Threatened Diné traditional knowledge and the sacred | 12 | |
| Needs for sense of community and community voice | 5 | |
| Feelings of powerlessness | 4 | |
| Concern for health | 4 | |
| White man's objectionable behavior | 3 | |
| Oil company behavior | 3 | |
| Violation of sacred spaces | 3 | |
| Money as ruiners of Diné culture | 3 | |
| Other negative social impact | 3 | |
| Environmental monitors endangered | 3 | |
| IHS PHS negative role | 1 | |

A detailed thematic analysis follows to allow readers to see how themes were derived.

| Broader themes | Themes | Participant concerns |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | - | e theme "Bek'ehgo Da'iinaanii (beliefs and nses were as follows: |
| Traditional knowledge and the sacred is threatened | Original instructions to keep and care for land | Changing Woman, our mother and our god, gave our forefathers this land with a warning to keep, care for and to never forget the homeland with and if they forget it will not be good for them. |
| | Sacred spaces are descrecrated by bull dozers | Some hills, valleys and springs around here have been held as sacred where our ancestors from time immemorial made offering and prayers . Recently, some of these valleys and hills have been desecrated as bull dozers have level them to the ground. |
| White man's war on land | White man's war on Diné and land; oil companies an extension of attitude and scheme | When the White man came from the east, they declared war upon our people and forcefully move them off their land and claim it for their own. After four years in exile our people made a Treaty with the United State in which a portion of our land was given back and our people return to their homeland. The 1868 Treaty U.S. recognized Navajo sovereignty. With federal policies White people had interfered with our government by impose their laws disregarded our sovereignty status. The Oil Companies an extension of this attitude scheme and manipulate our Tribal Government and local communities to secure permit for drilling and fracking operation. Agent from the oil companies have approached individual in our communities with monies to secure fracking permit. This underhandedness is pulling community apart. |
| | Re all the violations: is this the white man's definition of compassion? | Is this the White man definition of compassion "Da'diish ahojooba' wolyé? |
| | Insensitivity and inhumanity hard to bear | The insensitivity and inhumanity is hard to bear and has only created mental and physical anguished. |

| - | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protests to no avail | Despite protests experiencing mounting health and environmental problems | We protested against drilling and fracking but still they came and now for monies our lives, our home and our environment are experiencing mounting health and environmental problems. |
| Family and community disruption | Family and community disruption | It has divided and disrupts families and communities unity. People who gave their initial consent realized later what they have done when it was too late and now lived with regret and a stain. The communities members some openly and other silently abhorred what happen. |
| Spiritual connection to land is violated | Spiritual connection to land is contaminated | Our spiritual connection to our land, water, and air has been contaminated and we along with other life are beginning to experience health problems. |
| Fracking causing health problems | Fracking chemicals into water causing hardship on people and wildlife | The continuous gas burning has created a stench that is awful and unnatural. Fracking have force chemical into our ground water and are now present in our spring and causing hardship for our domestic animals and wildlife. |
| In reference to questions under the theme; Nihigáál (livelihood and health) the communities responses were as follows: | | |
| Ancient and sacred ecology situation with white man's drilling and fracking | Area has been ancient and sacred with clean environment. | This ridge is called Sis Naatleel Ni'ah and it is our home and is sacred. The old people cared for these lands and the springs on this ridge and it has always given good water for irrigation and brought a good harvest. The air and water was clean good for the health of our community. We had cattle, sheep, horses and plenty of wild life on these hills and ridges and now most of the wildlife have disappeared. Our grandparents have harvest pinion, berries and other herbs in these hills, valleys and ridges and now there are no more. The land and water is our stable. |
| | Pastures turning brown and animals eating such grass; wildlife is gone. | Our pastures once rich with green grass have turn brown and our animals are eating the brown grass the wild life are all gone. |

| | Changes in ecology of communities; | The fracking operations are drastically changing the ecology of our communities. |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Resilience of people | We have survived the White People abuses and insensitivity, we are still here and we will continue with hope we have our beliefs that will strength and sustain us. |
| Lack of respect for land. sacred sites and people | Oil companies have no respect for land, people, burial sites and sacred spaces. | The oil companies have enter our communities by stealth. These companies have no respect for land, people and life nor our sacred places and burial sites They do not listen or respect our plead to stop these operations |
| Money rules | Money is only value and rules them | The only value they understand is money and that is what rules them |
| Despite objections, fracking and drilling continues | Communities object to fracking and drilling but companies continue anyway | The communities in this agency objected to any further drilling or fracking, but the companies continuing drilling and fracking operations |
| Health problems engendered | Elders beginning to experience respiratory problems | People especially the elders are beginning to experience respiratory problems. |
| | Afraid for health | We are afraid for our health |
| Air and water monitors in danger | Air and water monitors chased off drilling sites | Recently some air and water monitors were chased of a drilling sites. |
| In reference to questions under the theme "Aha'ana'oo'niil (k'e, warm and reverent relationship with people and environment)" the communities responses were as follows: | | |
| History with white man | History with white men and Diné rebuilding of land since 1868. | We have lived here before the White men came and when they came they violently took our land and imprison us at a place called Ft. Sumner. Our people return after undergoing four years of miseries and harrowing experiences. More than three quarter of our ancient land was confiscated and a small portion of our former land was returned to us through the Treaty of 1868. We have since rebuilt our lives here. |

| Community needs | Lack of community infrastructure | Our communities despite the lack of infrastructure have endured the dirt roads, lack of electric and running water in our home and live peaceful lives. |
|---------------------------------------------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Decisions should not be based on money but on land, family, animals, water. | We should not make decision base on money but consider the impact these proposal would have on our family, our belief, animals, water, air and land. |
| Social impact | Raising children to support each other; what affects a family affects all. | We raise our children and supported each other. We were taught that whatever affected a family affect all. |
| | Private drilling from community is contemptible | Securing rights to drill privately from community members is contemptible and conniving. |
| Diné traditional knowledge | Diné traditional knowledge and sustainability | The land and water was good and we never thought that one-day our land and water would be threatened or our animals and our pasture would be in grave danger. Our grandfathers have taught us to respect mother earth and all life and to use it with offering and prayers that the holy people will give us healthy animals and a good harvest. We pass these teachings and beliefs to our children. |
| Despite opposition no one listens | We opposed fracking. Dooda baahadzid but no one listens. | When the Oil Companies proposed fracking by drilling deep under ground and force chemical and by pressure force more oil and gas out. We opposed it, we said no its dangerous, "Doo bik'aa hahaz'it'i and Sis naatl'eel". No one listen. No one listen at our Tribal Government and Federal Government. Our leader Marshall stringently opposed more drilling and fracking "Dooda, no more drilling". |
| Ineffective ole of state and tribal leaders | State and tribal leaders and oil companies don't value our lives. No leadership. | The tribal and state leaders and oil companies don't value our words or our lives, they have no respect for our rights to our land - there is no leadership. Eastern Navajo is a forgotten people. Our President Russell Begay even asked, where we were? Long time ago we had good leaders who listened. |

| | Leadership not alert. | The proposal for more drilling and fracking was made ten years ago and we didn't say anything. Our leaders did not alert us to the danger of the proposal and some did but we didn't listen. We need our government to be informed and enforce existing policies to protect the people and their natural resources. Our current leaders signed our life away. |
|-----------------------------------------------------------------------------|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Need to work together and communicate | Need to work together and listen to each other; communicate; | Some of our people were privately approached by individual representing the oil companies with monies to obtain permit for drilling and fracking. These people who sign the permit were not informed just how danger this operation would be to their environment and personal health. We need to be informed of the danger of these operation, Shoh, dinoosii[. We don't work together, we need to listen to each other. Doo shideeti'da t'áá doo dahnosini. (Don't think it has nothing to do with me, get involved). |
| | Make our voices heard for future generations | We need to communicate with our elders, we need to unify all the communities in Eastern Navajo Agency and make our voiced heard. We all have home here, we use the land and water, our animals used these lands and our children will use the land after us, we have to think about them. The Treaty of 1868 returned our rights to our land and we need to exercise those rights. |
| Environmental protection monitors in danger | Oil workers chase off environmental protection monitors | The oil workers have chase off environmental protection monitors. |
| Role of IHS PHS | PHS did not intervene or inform us | The Public Health Service did not intervene or inform the people of the hazard of drilling and fracking to the health of the people. |
| In reference to questions under the theme "Hodilzin (Rest and reverence for | | |

| Holy people instructions for land, water, fire, air | Traditional knowledge/holy people instructions for land, water, fire, air | This is our land, our life and it is sacred. Our Mother, the goddess, Changing Woman gave us this land for our inheritance. Mother Earth, Water, Fire and Air are holy people who made all life possible and we were taught by our grandfathers to respect and use it wisely and reverently. We were told by Changing Woman to hold on to the land and to remain within it. |
|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Plants, herbs, land, water once productive in danger; environmental health in danger | In these valleys and hills are herbs and rare plants and the places where they grew are in danger, some of these plants are already suffering their leaves are turning brown. The land and water was pure and productive, since the fracking began the grass has turned brown and drought has set in. The wild life deer and antelopes have since left the areas. Now we look over our land that were once green turning brown and our animal's health is being threaten. |
| | Quality of land, water and air have changed negatively. | The qualities of the land, water and air have changed and |
| | We have served white man but preserved our ceremonies, prayers, songs and beliefs for our land and children, grandchildren | We have survived all that the Whites have thrown at us, we have preserve and will continue to preserve we have our ceremony the Blessing Way by which we live and pray and our sacred songs and with the blessing of our gods we will survive. Our beliefs is our strengthen and will work to preserve our land the future our children and grandchildren and we teach them never to leave the land nor sell it. |
| Powerlessness | Personal relationship with land that we are powerless over, but we will protect it | We have personal relationship with our land. Our umbilical cords are buried here and our children, grandparents, friend and neighbors are buried here and it is sacred. This land is all we have and we looked angrily, hurting and powerlessly watched while drilling and fracking desecrates our beloved homeland. The land is all we have and that is where our heart is (akwe'4 nihijei si'3') and we will protect, it is our life |
| | We have opposed but they still came | We have opposed these operation but they still came. It's dangerous we said, we have children and elders still they don't listen. |

| Sacred spaces in danger | Sacred spaces leveled by bull dozers | Several sacred places where prayers offering have been level by bull dozer and it makes our heart to hurts. |
|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Sacred sites leveled by bull dozers | Just south of Counselor chapter three sacred site Doo bikeh' hahaz'ti'i, bijei and Sis naatl'44l were leveled by bulldozer. |
| Oil companies lack respect | Oil companies have no respect for land, people and beliefs. | The owners of these oil companies have no respect for our land, people and belief. There only objective is extracting the gas and oil for profit from the land and don't care what they do to the land or the people. |
| Money ruins community and traditional knowledge | Selling our land for money is ruining us | These companies know we have economic need and they use that to draw community members to obtain permission for drilling and fracking on their grazing land. We were told not to give up our land, now we are selling our land for money. Money has and is ruining us. Our medicine men tell us that, the land has been hurt. |
| Health in jeopardy | Health in jeapordy: migraine and respiratory problems; | The stench is causing the elders and children migraine headache and respiratory problems. We fear that if this continues it will place our health in jeopardy. |
| Air and water monitors in danger | Oil workers chased air and water monitors off project areas; should not be tolerated | In Lybrook community oil workers have chased air and water monitors off the projects areas. This should not be tolerated, this is our land and we have a right to know if our lives are in danger. |

OBSERVATIONS

1. Discrimination, bias and prejudice against Diné traditional knowledge are forms of cultural oppression, social and environmental injustice. Diné traditional knowledge, morality, values, a sense of the sacred and principles for a balanced life (e.g. hóózhó, k'e) are being ignored by tribal, state and federal leaders and policy makers. This implies that non-western, non-modern world views no longer count as contributors to how health and wellbeing are perceived and acted upon. This is a

- tragic situation since Diné elders' worldview seeks a well balanced life rooted in harmony, happiness, beauty, peace and love.
- 2. Human and ecological trauma are results. When Diné traditional knowledge is ignored, not only the people suffer from trauma, but so do the plants, herbs, ceremonies, animals, birds and other life forms. There are environmental trauma and social consequences because many Diné depend on the natural world for their wellbeing and livelihood. Traditional Diné rely on the natural world for a sense of wholeness and with a beloved kinship with the earth and sky. Diné ways of knowing and being are threatened by fracking and drilling. In this way, Traditional Indigenous world views are threatened with extermination.
- 3. No prior informed consent, local input, and education from a Diné traditional knowledge perspective produces traumatic community level response.
 Participants indicated they were kept out of the information and education loop regarding issues of fracking and drilling. The education and input system was not proactive. These communities were not informed nor was input sought regarding the full range of fracking and drilling consequences.
- 4. Failed leadership. Lack of attention to Diné traditional knowledge results in failed leadership. There are many implications here that begs the question of how we view leadership. Failed leadership when Diné traditional knowledge is ignored strongly suggests conventional leadership qualities or criteria are discriminatory and insensitive. The participants felt their state and tribal leaders have failed them. This also included the health departments (e.g. Indian Health Service) who failed them regarding the inevitable threat and danger to their physical health, air and water qualities and threat to plants and animals life. After communities became fully aware of the operations they began protesting, but the tribal leaders had already made the deals. Still the communities contacted the tribal government and state official to stop the fracking but no one listened, but that did not deter the effort of the communities. The communities now work with environmentalists and are informing the community and anyone who will listen about the plight of the people of Navajo Eastern Agency.
- 5. **Environmental contamination and violence.** Within a few years of operation, participants claim fracking has contaminated the underground water and air qualities that cause a ripple affect endangering livestock, plant and animal life. There were

once game animals who now have all left the area. The pollution from the day and night burning of methane gas is causing unexplained illness and increased asthma among the elderly and children. The communities fear that if fracking were not stop, it would permanently damage community health and wellbeing and the natural environment.

- 6. Lack of Diné relevant research at onset could have avoided many problems. A Diné traditional research method, like the Hózhóógó na'adá process, should have been involved from the very onset of proposed fracking and drilling. This is because culturally and linguistically relevant models like the Hózhóógó na'adá document Diné community voices and concerns such as recorded in this report. Health and environmental agencies should have been taken the opportunity to inform the communities what fracking will do to their water, air and land as well as impacts on the animals and flora and fauna.
- 7. Process has circumvented community action resulting in dissension. Had the communities been proactively informed, then they could have decided what they want to do. Nothing like that seems to have happen here. The oil companies impose their demands on the tribal leaders with the promise of money. The leaders who made the final decision didn't understand the danger of fracking and they approved projects without consulting with the communities to be impacted. Whenever communities are not adequately and proactively informed, there will be dissension and discontent.
- 8. Individual and community powerlessness and agency is one result of situation. When impacted Diné community members are not proactively consulted, this contributes to a sense of individual, family and community powerlessness and agency. This sort of situation is not democratic and results in social, economic and political inequity and injustice not only at the Navajo Nation level, but also at the state and federal levels. Conflict, tension and contradiction between traditional knowledge and the energy extraction industry.
- 9. "White man's" role is without compassion and is violent and unhealthy. Participants perceptions of the "white man" and his violent history and way of knowing are not healthy and wise. His knowledge is not compassionate and results in violations of the health of the land and people because of his blind faith in money and profit.

- 10. Promises of money and wealth don't work in long run. Money and perceived wealth derived from desecration of the sacred mother earth is unwise when compared to the health and well being of the people and the land. Diné traditional knowledge is concerned with compassionate and positive sustainability of the people and their relationship to the land, water, plants and other life forms. On the other hand, money comes and goes.
- 11. Need for local community participation, networking and communication. The impacted Diné communities need to work together, network and communicate with each other regarding these issues. Diné traditional knowledge has ancient built practices rooted in interdependent and compassionate relations (e.g. k'é, adoone'e, hózhó doo k'é nahazdlii'). Leaders must support, finance and resource this endeavor. For one thing it leads to long term health of the land and people in a harmonious and balanced manner.
- 12.Use of mobile phones during community meetings doesn't work. The use of mobile phones staff meeting was clearly disruptive and they should be switched off. Most staff felt it is not necessary to receive personal phone calls in the meeting except under certain circumstances, but permission should be sought from the team leader, manage and or chair.

LIMITATIONS OF STUDY

This study is part of a long range process that will invoke Dr. Benally's findings regarding a Diné-centered evaluation process. For example, Dr. Benally calls the overall process Nabikid tsaáhákees. Stage One is called Bééhozin (what is known); Stage Two is called Nabikid tsíjíkees (reflection, action, new action; Stage Three is called Bininá'idikid (presentation of assumptions for validation), Stage Four is called T'áá'aníií doo na'nitin nááleeh (the truth becomes a teaching) (H. J. Benally, 2008).

This study addresses Stage One or bééhozin and part of Stage Two or nabikid tsíjíkees.

FOLLOW UP ASSESSMENT

1. The two remaining stages (see above) will be addressed as next steps.

- 2. Based on the data yielded by the October 27 dialogue and the next two stages, the evaluators will design a community survey that seeks wider community input and that will assess social, economic, political conditions using a Diné traditional knowledge lens.
- 3. The intent here is to assess or evaluate Diné traditional knowledge views of natural resource development such as what occurs in the fracking and drilling industry.
- 4. A final report will be drafted by late summer 2017.

BIBLIOGRAPHY

Benally, H. J. (2008). *Hozhoogo Naasha doo: Toward a Construct of Balance in Navajo Cosmology.* (Doctor of Philosophy Dissertation), California Institute for Integral Studies, San Francisco, CA.

Benally, L. W. E. a. H. (2015). D R A F T - DFSA - COPE/REACH Hózhóógó na'adá Training Session. Retrieved from Shiprock, New Mexico:

Emerson, L. W. (2015). Shiprock Community Insights Report Regarding Hózhóógó na'adá Seminar. Retrieved from