Message (Digitally Signed)

From: Hamilton, John (IHS/PHX) [John.Hamilton@ihs.gov]
Sent: 3/3/2016 5:43:34 PM
To: Carruth, Robert [rlcarr@usgs.gov]
CC: Lorenz, Robert (IHS/PHX) [Robert.Lorenz@ihs.gov]; Lee, Bessie [Lee.Bessie@epa.gov]
Subject: RE: Abbreviated Summary of the Hopi Water Infrastructure Call, February 18, 2016
Attachments: smime.p7s

Rob,
That sounds workable to me. UVM certainly needs as much well water from the proposed wells as possible, considering the complexity and cost of operating the RO WTP and deep well. Two of the existing N aquifer wells probably should serve as backups or supplements for the new wells.
John

From: Carruth, Robert [mailto:rlcarr@usgs.gov]
Sent: Thursday, March 03, 2016 10:26 AM
To: Hamilton, John (IHS/PHX) <John.Hamilton@ihs.gov>
Cc: Bessie Lee <Lee.Bessie@epa.gov>; Albright, David <Albright.David@epa.gov>; Belma Navakuku - Sichomovi Village (sichomovicsa@hopitelecom.net) <sichomovicsa@hopitelecom.net>; Bonnie Secakuku (csasipaulovi@gmail.com) <csasipaulovi@gmail.com>; Rea, Brad (IHS/PHX) <Brad.Rea@ihs.gov>; Bruce Fredericks <bruce.fredericks12@gmail.com>; Carmelita Coochyumptewa <c.cooch01@yahoo.com>; Carrie Sakeva <csakeva@hopi.nsn.us>; Cedric Kuwaninvaya (csaupper.moenkopi@yahoo.com) <csaupper.moenkopi@yahoo.com>; Chester Carl <CCarl@htha.org>; Christine Tawahongva <ctawahongva@gmail.com>; Chuck Villa <kanzawindkaw@yahoo.com>; Clayton Honyumptewa <chonyumptewa@hopi.nsn.us>; Craig Andrews (candrews@hopi.nsn.us) <candrews@hopi.nsn.us>; Cristal Quinn <cristal_a._quinn@hud.gov>; Dennis Rodriguez <dennis.rodriguez@bia.gov>; Eldine Stevens <eldine.stevens@bia.gov>; Elizabeth Wadsworth <servicescoordinator.wadsworth@gmail.com>; Elmer Douma <elmer.douma@bie.edu>; Matson, Eric (IHS/PHX) <Eric.Matson@ihs.gov>; Everett Calnimptewa <ecalnimptewa@hotmail.com>; Gail Poley <gpoley4@yahoo.com>; Garlyn Navakuku <garlyn.navakuku@bie.edu>; GSHonanie@hopi.nsn.us; Herman Honanie <hehonanie@hopi.nsn.us>; Howell, Adam <Howell.Adam@epa.gov>; Ivan Sydney <isfmcv@hopitelecom.net>; Jack Sullivan (jack.sullivan@bia.gov) <jack.sullivan@bia.gov>; Jacquelyn Lamson <jmsumatzkuku@yahoo.com>; Jaylene Adakai Sanchez <jaylene.adakaisanchez@bia.gov>; DeCoteau, Jesse (IHS/PHX) <Jesse.Decoteau@ihs.gov>; John Graves <john.gravesjr@bia.gov>; John Krause <John.Krause@bia.gov>; Joseph Davis <davisjb.davis@aol.com>; Kathlene Sumatzkuku <kasumatzkuku@gmail.com>; Kendrick Mahle (kendrick.mahle@bia.gov) <kendrick.mahle@bia.gov>; Kerry Brough (kbrough@cox.net) <kbrough@cox.net>; Kim Secakuku <secakukukim@yahoo.com>; Kristin Sieweyumptewa <sieweyumptewa@hotmail.com>; Leroy Sumatzkuku <lsumatz@myway.com>; Leslie Nasingoetewa <lnasingoetewa@hopi.nsn.us>; Li, Corine <Li.Corine@epa.gov>; lpuhuyesva@hopi.nsn.us; Lorena Naseyowma <lnaseyowma@frontiernet.net>; Loretta Orona <loretta.orona@az.usda.gov>; Yazzie, Lydell (IHS/PHX) <Lydell.Yazzie@ihs.gov>; Lynette Pollari <pollari@tp-studio.com>; Magnuson, Janet <Magnuson.Janet@epa.gov>; Marlene Walker (marlene.walker@bie.edu) <marlene.walker@bie.edu>; Marvin Naqua-Hyeoma <mnaquahyeoma@yahoo.com>; Mary Navanick <MNavanick@hopi.nsn.us>; Melvin Todacheene <Melvin.Todacheene@bia.gov>; Micah Lomaomvaya (mlomaomvaya@hopi.nsn.us) <mlomaomvaya@hopi.nsn.us>; Michael Janes <michael.janes@ghd.com>; Mike Luecker <mike.luecker@az.usda.gov>; Monte Roessel <charles.roessel@bie.edu>; Patrick Thompson <sipauloviwater@gmail.com>; PERKINS, SUSANNE <Perkins.Susanne@epa.gov>; Phyllis Wittsell (villageoftewacsa@gmail.com) <villageoftewacsa@gmail.com>; Randy Wolff <randy@experiencehopi.com>; Lorenz, Robert (IHS/PHX) <Robert.Lorenz@ihs.gov>; Robert Mahkewa <mahkewajr@yahoo.com>; Robert Whitehair (robbiewhitehair@gmail.com) <robbiewhitehair@gmail.com>; Ronald Wadsworth <tsivookvasa@yahoo.com>; Sandy Whitehair <swhitehair@songoopavi.org>; Selwyn Sekaquaptewa <swsh2o@yahoo.com>; Sherilyn Honanie <nkootswatewa@yahoo.com>; Shungopavi Administration <shungopaviinfo@gmail.com>; Silversmith, Marlinda <M.Silversmith@bie.edu>; Sonia Adams <soniajadams@yahoo.com>; Stanford Lomakema (walpicsa@hopitelecom.net) <walpicsa@hopitelecom.net>; Susan Secakuku <secakuku@hopitelecom.net>; Suzanne Jamison <sznjmsn@gilanet.com>; UMowa@hopi.nsn.us; Upper

Moenkopi <upper.moenkopi@yahoo.com>; Vern Mansfield <mansfieldvern@yahoo.com>; Yvonne Day <yday@hopi.nsn.us>; Yvonne Hoosava <yhoosava@yahoo.com>; Carter, James (IHS/PHX) <James.Carter2@ihs.gov>; Melvin, Daryl (IHS/PHX) <Daryl.Melvin@ihs.gov>; Tara Houska (thouska@homerlaw.com) <thouska@homerlaw.com>
Subject: Re: Abbreviated Summary of the Hopi Water Infrastructure Call, February 18, 2016

Hi folks,

I have to be in another meeting this morning so I won't be on the call today. The proposal for the Upper Moenkopi drilling is just about ready for review by the Hopi Tribe and the IHS. In reading the notes from our last meeting, I didn't mean to give the impression that the new wells between the Reservoir and the Highway should be limited to 20-30 gpm....the detailed aquifer tests will help us determine the sustainable discharge from the new wells. As for the 3 existing wells, I was suggesting that the current pumping rates and drawdown be reviewed. Since the quality of the water is good, it may be possible to reduce the pumping rates to something that is sustainable for Wells 1&2, so that the pumps don't have to be cycled on and off manually to prevent drawdown to the pump intakes. If the new wells are capable of producing enough to meet current demand, then the existing wells 1&2 could be rested and used as backups.

Just some thoughts. After we know what the new wells are capable of producing will be a good time to have the discussion about how the existing production wells might be used in the future.

Thanks,
Rob

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Robert Carruth
U.S. Geological Survey
520-670-6671, ext. 234 (ofc)
520-904-8419 (cell)

On Wed, Mar 2, 2016 at 3:29 PM, Hamilton, John (IHS/PHX) <John.Hamilton@ihs.gov> wrote:

> The next call is Thursday, March 3, 2016, at 9:30 am Hopi time. Bessie Lee forwarded the call-in information. The call in phone number is (866) 299-3188 and the conference code is 415 972 5623.
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> Participates included:
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> Hopi Water Resources Program – Lionel Puhuyesva and Uberta Mowa
>
> Hopi Finance –Marie Hoosava
>
> Sipaulovi – Bonnie Secakuku, George Mace and Geraldine
>
> Upper Moenkopi – Robert Whitehair
>
> BIA – Eldine Stevens, Wendell Honanie, Melvin, Scott and Nancy

HUD – Cristal Quinn

USGS – Rob Carruth

IHS – Brad Rea, James Carter, Robert Lorenz and Lydell Yazzie

USEPA - Bessie Lee, Janet Magnuson and John Hamilton

Hopi Arsenic Mitigation Project (HAMP)

Robert reported the 10% design review meeting for the Second Mesa water lines portion of the HAMP was held at the District office on January 14, 2016. This work is funded by projects E55, E73 and U62. Keith had said AML funding of a portion of the waterline from Shungopavi toward the Cultural Center is progressing. Work is proceeding on surveying and final village approvals will be secured after the final alignments are determined. Then IHS will work with HCPO to complete archaeological surveys of new alignments, prior to IHS consultation with AZ SHPO.

Lionel said the Tribal Council has been focusing on the EPA arsenic enforcement action at the Hopi Cultural Center. We think an agreement between the Tribe and EPA on this issue is nearing completion.

The Tribe submitted the PER, EA and Strategic Plan to USDA for consideration of future funding of a loan and grant for the HAMP, although this can't progress to the funding stage until the Tribe completes all past-due annual single financial audits, which are underway. Tara Houska, with Homer Law, is

taking the lead in working with USDA in this application process. The Tribe is also still looking at options for power supplies to the various components of the HAMP, including the wells, booster stations, SCADA and related.

The next issue for the Council will likely be authorizing hiring a Director of the Hopi Public Utility Authority, which will be the operator of the HAMP water system and funding the position. The Council is also considering downsizing the HPUA Board of Directors from 7 members to 3, as an interim measure, during the HAMP planning, design and construction process. Then the Board would reach full strength as the HAMP is put into operation. A Council resolution is pending to approve the budget for the HPUA Director and the smaller Board. Former Councilman, George Mace, expressed appreciation for the ongoing Council actions on the HAMP.

Robert said IHS and the Hopi Tribe are considering potential locations for an elevated water storage tank, near the Cultural Center. They will confer with the Second Mesa Villages regarding potential locations.

Eldine said the Interior Solicitor's Office finally reviewed the E90 project documents for the planning project to study the potential HAMP water line extensions to the BIA/BIE water systems at Second Mesa Day School, the Hopi Junior/Senior High School and Keams Canyon. Another Solicitor attorney had a question, but she feels the documents will go forward to the Directors office for signature shortly.

Bessie asked if there may be HUD CDBG funds available this year for the HAMP project, since the project is moving into construction at Second Mesa and the Tribe has forwarded the funding application to USDA. Cristal said the 2016 NOFA is not yet published, but the Tribe could start considering applying for CDBG funds this year. Hopi is eligible for $2.2 million of CDBG funding, although the Tribe will need to complete the above referenced financial audits, or support an application from the Housing Authority.

Shungopavi

Lionel said all residential water meters have been purchased and delivered, so installation should begin when it warms-up.

Water Resources is working on a cost estimate for the repainting of the elevated water storage tank interior. Lionel asked for recent pictures of the tank interior showing rust and they should be available from the last sanitary survey.

Moenkopi

Brad has been working with Upper Moenkopi on renewal of the NPDES wastewater discharge permit. They are waiting for the toxicity testing results to include with the application. The official NPDES applicant will be the Village government, since MUA is not back in operation. Lionel mentioned the Tribe's 401 water quality certification process will not allow reuse of wastewater effluent on "edible food crops".

The RO WTP has been inoperative for over one month, and Robert Whitehair is concerned about falling water levels in the water storage tanks. All 215 houses in the village are metered and the Village has been taking meter readings since mid-September.

A cost proposal for test well drilling is expected from USGS shortly. USGS would like to drill two, low yield wells pumping 20-30 gpm near the Pasture Canyon Reservoir. They are suggesting the wells produce continuously, but this may not be enough to meet the needs of the community? EPA suggested the new wells would replace the existing wells, so the yield would need to match or hopefully exceed the present well yield. Robert Lorenz said the present test well budget did not envision drilling north of highway US 160, so if these wells are successful, additional funds would be needed for power, pipelines and SCADA. If the wells are drilled this summer the Village and the Tribe could apply for additional DWTSA funding in the fall.

John Hamilton, PE

EPA Engineering Consultant