CENTER *for* BIOLOGICAL DIVERSITY

Because life is good

April 30, 2010

Ms. Charlotte Ely
U.S. EPA, Region 9
San Francisco, CA 94105
Email: ely.charlotte@epa.gov
FAX: 415-947-3537

RE: Failure by the Environmental Protection Agency and the Department of Defense to obey the National Environmental Policy Act in order to (1) promote the transfer of rechargeable Huachuca City wastewater away from its point of origin near the Babocomari River to Fort Huachuca, and (2) in order to inflate the recharge total of Fort Huachuca's paper water budget.

Dear Ms. Ely,

The Environmental Protection Agency's (EPA's) Environmental Analysis for the City of Huachuca Effluent Recharge Project (EA) violates the National Environmental Policy Act (NEPA) on multiple accounts. The EA is tiered to multiple Department of Defense (DOD) documents which, in themselves, are not lawful for this project. These documents include (1) DOD's Environmental Analysis for Artificial Aquifer Recharge & Treated Effluent Management at Fort Huachuca (EA FH AAR 2000), (2) DOD's Programmatic Biological Assessment (BA 2006), and (3) DOD's newly uncovered, previously secret, Record of Environmental Consideration (2003). EPA's reliance on these unlawful DOD documents is, in itself, a violation of NEPA. The inadequacies of each document will be addressed individually.

EPA and DOD fail to evaluate and fail to fully disclose the proposed action's effects on the Babocomari River, the confluence of the Babocomari River and the San Pedro River, and the endangered Huachuca water umbel found in the confluence's immediate area. The proposed action does more to inflate Fort Huachuca's paper water budget than to protect the San Pedro Riparian National Conservation Area (SPRNCA) and its fragile, dependent endangered species. CBD#1

EPA's Notice of Availability states:

> "The U. S. Environmental Protection Agency (EPA) is considering awarding $1,590,500 of federal grant funds to the City of Huachuca (City) for pond upgrades and the construction of part of a force main. Fort Huachuca (Army) has already complied with the National Environmental Policy Act (NEPA) to construct much of the force main and lift stations. In its entirety, the project

consists of 1) constructing a wastewater holding pond at the City's existing sewage treatment facility, 2) constructing three sewage lift stations, and 3) constructing a force main to convey untreated sewage from the City's holding ponds to Fort Huachuca's wastewater treatment facility (WWTF) for treatment and reuse or recharge at Fort Huachuca's recharge facility.

The purpose of the project is to two-fold: 1) to upgrade the City of Huachuca's sewage treatment facility, which currently consists of three unlined wastewater evaporation ponds and one abandoned lined pond located within the 100-year flood plain of the Babocomari River, and 2) to help the Fort mitigate approximately 1000 acre feet annually of groundwater pumping, a stipulation of a 2007 U.S. Fish and Wildlife Service Biological Opinion with which Fort Huachuca is required to comply under court order. The proposed project consists of constructing a lined wastewater holding pond at Huachuca City's existing sewage treatment facility, three sewage lift stations, and approximately 40,000 feet of force main. The force main will use approximately 1,463 kWh/day to pump 175,000 gallons per day (gpd) of sewage up 435 feet in elevation and over almost 8 miles in distance from the City to the Fort. The sewage treated at Fort Huachuca's wastewater treatment facility will either be reused or recharged through the Fort's recharge facility, which is located in an unnamed wash feeding Soldier Creek (a tributary of the Babocomari River)..."

The magnitude of the project is impressive. The statements that "Fort Huachuca...has already complied with NEPA" and "the Fort has already constructed the lift stations and the portion of the force main...after complying with the National Environmental Policy Act" are lies.

Similarly, the EPA website (http://www.epa.gov/region9/nepa/epa-generated.html) states,

"The Fort has already constructed the lift stations and the portion of the force main from the border of the Fort to the Fort's WWTF, after complying with the National Environmental Policy Act (NEPA)."

The EA FH AAR fails to comply with applicable law on multiple accounts.

On page ES-1, the EA FH AAR states,

"...In addition, the possible future inclusion of treated effluent from nearby civilian communities or enterprises for treatment at the Fort WWTP #2 is considered."

But "the possible future inclusion of treated effluent from nearby civilian communities or enterprises for treatment at the Fort WWTP #2" is not considered. No analysis and no specifics are included anywhere in the document.

On page ES-2, the EA FH AAR lists its alternatives. No alternative is included that examines the advantages of local recharge versus the costs, detriments and benefits of the importation of distant civilian effluent. Negative cumulative effects are ignored.

On page 1-1, the EA FH AAR states, "In addition, possible future inclusion of treated effluent from nearby civilian 16 communities or enterprises for treatment at the Fort's Wastewater Treatment Plant (WWTP) #2 and reuse/recharge on the installation is being considered." This statement quickly becomes a mantra. But as we responded above, the mantra has no basis in fact.

On page 2-3, the EA FH AAR states, "In addition, the possible future inclusion of treated-effluent from nearby civilian communities or enterprises for treatment at WWTP #2 is considered." The baseless mantra continues.

On page 2-6 and 2-7, the EA FH AAR states,

> "...In addition, Huachuca City's sewage disposal basins, located along the northwestern edge of Training Area C on the East Range, are being considered for possible inclusion in the Fort Huachuca AAR program.
>
> The piping of treated effluent from the Huachuca City basin to the East Range recharge facilities is also analyzed as part of the Proposed Action, should this option eventually be considered advantageous to all parties concerned. This will require trenching for pipelines and a booster station to support delivery of the treated effluent uphill to the facility, as well as some additional treatment. This EA addresses the addition of "off fort" effluent being treated at WWTP#2. Because no pipeline route has been proposed to date, further analysis will tier off of this EA to cover trenching and pipeline installation associated with this activity. Analysis of this option is not intended to construe that formal negotiations or commitments of any kind have been made by any of the parties potentially concerned."

After the mantra, we find here the extent of the "analysis." We find the mantra phrase, "the possible future inclusion of treated-effluent from nearby civilian communities or enterprises for treatment at WWTP #2 is considered," four times in the EA FA AAR (pages ES-1, 1-1, 2-3, 2-6&7). No evaluation or discussion is included regarding, merits, alternatives, costs, needs, and controversies, etc. as required by NEPA.

On page 4-12, the EA FH AAR, states,

> "Construction activities associated with the treated-effluent reuse distribution and WWTP #2 upgrades were addressed in the 1999 *USFWS Biological Opinion on Ongoing and Programmed Future Military Operations and Activities at Fort Huachuca, Arizona.* This Biological Opinion determined that these activities would not jeopardize the existence of any federally-listed threatened or endangered species. Because the Biological Opinion addressed the pipeline activities and associated effects, these activities are not further addressed in this section. No take of federally-listed species was anticipated from this action."

The Biological Opinion (1999) does not examine the movement of Huachuca City's wastewater to Fort Huachuca for processing and recharge.

The EA FH AAR includes a "**TECHNICAL MEMORANDUM;** Biological Evaluation for Artificial Aquifer Recharge and Treated Effluent Reuse Management for

Fort Huachuca EEC Project No. 99190.15" (BE FH AAR). The BE FH AAR also fails to evaluate the effects of removing Babocomari source water from the immediate area. No evaluation is found of the cost and benefits of processing and recharging the wastewater near its local source instead of pumping the wastewater away from its origin. No evaluation or discussion is included regarding, merits, alternatives, costs, needs, and controversies, etc. as required by NEPA.

The BE FH AAR reconfirms the limited scope of the EA FH AAR on page B-2:

> "The proposed enhancements to this system include:
>
> • Extending the existing reuse pipelines.
>
> • Expanding the capacity of and improving the reuse facilities at Chaffee Parade Ground and installation ball fields to provide more efficient irrigation.
>
> • Replacing the feeder line to the golf course.
>
> • Replacing some current potable water irrigation with non-potable water.
>
> • Returning unconsumed treated effluent to the East Range recharge facility.
>
> • Installing heat exchange technology for cooling and heating in lieu of current consumptive uses at major consuming facilities along the reuse route."

The BE FH AAR does mention the pipeline on page B-2:

> "As the Biological Opinion [1999] also addressed the pipeline activities and associated effects, these activities are not addressed in this BE."

But the Biological Opinion [1999] **does not** address any upgrade of the Fort Huachuca wastewater treatment plant that includes importation of Huachuca City waste water. The Biological Opinion [1999] does mention Huachuca City's detrimental groundwater pumping and its effects on the Babocomari River, the San Pedro River and Huachuca water umbel.

On pages B-3 and B-4, the BE FH AAR also puppets the "consideration" mantra,

> "...In addition, Huachuca City's sewage disposal basins, located along the northwestern edge of Training Area C on the East Range, are being considered for possible inclusion in the Fort Huachuca AAR program.
>
> The piping of treated effluent from the Huachuca City Basin to the East Range Recharge Facilities is also analyzed as part of the Proposed Action, should this option eventually be considered advantageous to all parties concerned. This will require trenching for pipelines and a booster station to support delivery of the treated effluent uphill to the facility, as well as some additional treatment Analysis of this option is not intended to construe that formal negotiations or commitments of any kind have been made by any of the parties potentially concerned."

On page B-13, the BE FH AAR, states,

> " No known populations of Huachuca water umbel occur within or in close proximity to the Proposed Project area. Critical habitat for the species also does not occur in close proximity to the Proposed Action area."

But the BE FH AAR fails to acknowledge the proximity and/or the probable dependence of Huachuca water umbel on local recharge occurring from the Huachuca City sewage ponds. It fails to analyze the effects of denial of Babocomari source water from the confluence of the Babocomari and San Pedro Rivers. It fails to analyze the advantage of local recharge.

The Biological Assessment (2006) ("BA 2006") cited by the EA states on page 262:

> "Fort Huachuca has submitted a project for funding in FY08 that will recharge up to 400 acre-feet/year of treated effluent to be generated by Huachuca City. The recharge facility will be constructed on Fort Huachuca property but the actual location will be assessed based on ability to provide spatially-based mitigation as discussed in section 5.2.11."

The BA's Section 5.2.11 is purely futuristic doublespeak with no analysis of the movement of source water from the Babocomari uphill to Fort Huachuca for recharge. In fact, there is no mention whatsoever of Huachuca City's wastewater in Section 5.2.11. There is no analysis of the effects of denial of Babocomari source water from the confluence of the Babocomari and San Pedro Rivers. All that is present in the BA regarding Huachuca City effluent is found on page 276 within TABLE 18, "PROPOSED ACTION WATER PROJECTS FOR FORT HUACHUCA." TABLE 18 includes a single entry, "Huachuca City Effluent Recharge."

Included on EPA's webpage, and featured prominently as the basis of the EA is a previously unknown, previously secret Fort Huachuca document titled, "RECORD OF ENVIRONMENTAL CONSIDERATION." The document is signed by Fort Huachuca's Proponent Representative Gretchen Kent on October 3, 2003, NEPA Coordinator Gretchen Kent on October 2, 2003, Attorney Advisor Dan Haws on September 24, 2003, and Installation Environmental Coordinator Thomas Cochran on October 2, 2003. The document states that,

> "...the action has been reviewed and conforms with the action and analysis documented under the provisions of AR 200-2 (32 CFR 651.10) in the Environmental Assessments entitled: Artificial Aquifer Recharge and Treated Effluent Management, Fort Huachuca, AZ, July 2000.
>
> No additional circumstances exist, and the EA remains adequate. Therefore, in accordance with AR 200-2, 32 CFR 651.10, a Record of Environmental Consideration is appropriate in this case because the proposed action is adequately covered within the aforementioned NEPA Document."

In the previously unknown, previously secret RECORD OF ENVIRONMENTAL CONSIDERATION, we find the first mention of any specifics of the proposed action:

> "Construct approximately 40,000 feet of main sewer pipeline which will be pressurized and pumped up gradient with 3 lift stations between the fort's boundary with Huachuca City and the Fort's WWTP on Brainard Road. This project will convey up to 220 acre feet per year of effluent from Huachuca City, **and eventually from future development around the LAAF/Sierra Vista Municipal Airport,** to the Fort Huachuca WWTP for treatment and reuse or aquifer recharge on Fort Huachuca." [EMPHASIS ADDED]

This is the first time that any specifics of a source water transfer project are mentioned anywhere in the record [EA FH AAR (2000), BA (2006), and BO (2007)]. The Record of Environmental Consideration includes no analysis. The Record of Environmental Consideration does not include any evaluation or discussion regarding, merits, alternatives, costs, needs, and controversies, etc. as required by NEPA.

Emphasis is added to the statement "and eventually from future development around the LAAF/Sierra Vista Municipal Airport" because to date (2010), DOD, Fort Huachuca, and FWS have refused to include this planned, and obviously foreseeable, development in any evaluation of any local actions (neither baseline nor cumulative effects). And now in this previously unknown, previously secret document, we discover that Fort Huachuca is already preparing and building the infrastructure for this airport development!

We now attach and include additional information concerning this "future development around the LAAF/Sierra Vista Municipal Airport." The attachment is the Center's April 10, 2002, Notice of Intent to Sue Ft. Huachuca, the U.S. Federal Aviation Administration, U.S. Department of Defense, and U.S. Fish and Wildlife Service to remedy violations of Sections 2 and 7 of the Endangered Species Act based on new information necessitating withdrawal of the U.S. Fish and Wildlife "concurrence" that the transfer and development of 203 acres for the Sierra Vista Municipal Airport will not have an adverse effect on federally protected species or their Critical Habitat. The future airport development represents 757 new groundwater dependent, direct jobs and up to 581 acre-feet/year of new deficit, groundwater pumping. More details will follow later in this document.

Planned development of Fort Huachuca's airport property by the City of Sierra Vista must be included in any evaluation of environmental baseline, any cumulative effects analysis, and in the list of interconnected planned/foreseeable projects. CBD#2

None of the documents cited by EPA in this entire scheme (EA FH AAR 2000, BE FH AAR 2000, BA 2006, BO 2007, Record of Environmental Consideration, and the EA) examine the effect of removal of the effluent water on the Babocomari River, or the confluence of the Babocomari and the San Pedro Rivers. None of the documents examine the infrastructure implications for the development of the airport land. CBD#3

This development was withdrawn already once (2002) because it would result in too much additional deficit groundwater pumping to mitigate. Now we find evidence that DOD and Fort Huachuca have surreptitiously and illegally built the infrastructure to accommodate and to facilitate a dramatic increase in groundwater-dependent growth. And now we find that DOD and Fort Huachuca have been working to dramatically increase deficit groundwater pumping without lawful disclosure and evaluation!

AR 200-2 (32 CFR 651.10) cited in the Fort's Record of Environmental Consideration requires a formal Environmental Analysis for the project because there are so many new unanswered questions. The Record of Environmental Consideration is a document that nobody had ever seen for this project until EPA's revelation. In order for the Record of Environmental Consideration to be lawful, it must explain truthfully why a Categorical Exclusion (CE) is sufficient and/or why an Environmental Analysis is not

required (See http://law.justia.com/us/cfr/title32/32-4.1.1.3.14.3.89.2.html). A CE is not appropriate, and cannot be tiered upon for the Huachuca City portion of this project.

The degree of deceit and dishonesty exposed by the revelation of the airport development in the previously unknown and previously secret Record of Environmental Analysis cannot be condemned strongly enough. DOD and FWS have refused to include airport expansion in the BA (2006) and in the BO (2007). DoD and FWS refuse to include airport expansion as a planned and foreseeable action in spite of the fact that the City of Sierra Vista includes the annexation and development in its Master Plan (http://www.ci.sierra-vista.az.us/cms1//index.php?option=com_content&task=view&id=134&Itemid=473) and accompanying maps (http://www.ci.sierra-vista.az.us/cms1//resources/airport/masterplanmap%20%5BRead-Only%5D.pdf and http://www.ci.sierra-vista.az.us/cms1//resources/airport/Ex_5A.pdf).

The proponents of the airport development admit that 757 new direct jobs will result from the action (See the Environmental Analysis for the Transfer and Development of 203 Acres of Property adjacent to Sierra Vista Municipal Airport, Sierra Vista, Arizona, prepared for the City of Sierra Vista, Federal Aviation Administration, and the U.S. Department of the Army, by Coffman Associates, Inc., October 2001, p. 4.26.). Such a large new increase in direct jobs will inevitably result in significant new groundwater dependent growth. In fact, using commonly and historically accepted multipliers from Ft. Huachuca and the U.S. Army Corps of Engineers Construction Engineering Research Laboratory [See the US Army Corps of Engineers Construction Engineering Research Laboratory, Economic Impact Forecast System (EIFS) II: User's Manual, Updated Edition, Technical Report N-69 (Revised) May 1984.] and figures from the U.S. Census Bureau [See Census 2000, "Profiles of General Demographic Characteristics, Arizona," U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau, 2000, (http://www2.census.gov/census_2000/datasets/demographic_profile/Arizona/2kh04.pdf)].

The direct support of 757 people translates into direct and indirect support of at least 3,115 [3,115 = 757(1.684) + 757(2.43)], and up to 3,281 [3,281 = 757(1.684) + 757(2.65)] people. This action also represents new support for deficit groundwater pumping of at least 551 [551 = 3,115(365 days per year)(158 gpd)/325,851 gallons per acre-foot], and up to 581 [581 = 3,281(365 days per year)(158 gpd)/325,851 gallons per acre-foot)] acre-feet per year.

Now, as evidenced by the previously unknown, and previously secret, Record of Environmental Consideration (2003), we discover that Fort Huachuca has built the infrastructure for the airport development without the required lawful studies.

The BA (2006) states on page 36:

> "In June 2002, as an immediate and drastic measure to mitigate its impact within the Sierra Vista Subwatershed, the Army set aside further consideration of this transfer to the City of Sierra Vista (Appendix D). An alternative to conveyance is currently being considered by the Fort, i.e., a leasing action. If

either realty action is proposed in the future it will undergo a separate Section 7 consultation."

The BO (2007) states on page 35:

"For numerous years, the City of Sierra Vista has sought to acquire an additional 203 acres from Fort Huachuca adjacent to Libby Army Airfield (LAAF) pursuant to the Airport Improvement Act to be used for aviation-related uses. The City has previously acquired 72 acres under this Act in establishing a civilian municipal airport adjacent to LAAF. In June 2002 the Army set aside further consideration of this transfer to the City of Sierra Vista (Appendix D in the Revised PBA). An alternative to conveyance is currently being considered by the Fort, i.e., a leasing action. If either realty action is proposed in the future it will undergo a separate section 7 consultation."

The City of Sierra Vista continues to include its plans to acquire the land in its Airport Master Plan (http://www.ci.sierra-vista.az.us/cms1//index.php?option=com_content&task=view&id=134&Itemid=473) and accompanying maps (http://www.ci.sierra-vista.az.us/cms1//resources/airport/masterplanmap%20%5BRead-Only%5D.pdf and http://www.ci.sierra-vista.az.us/cms1//resources/airport/Ex_5A.pdf).

Not included on EPA's webpage list of supporting EA documents is the US Fish and Wildlife Service's November 21, 2008, "concurrence"' with Fort Huachuca's conclusion that the proposed action will have no effect on the lesser long-nosed bat *(Leptonycteris curasoae yerbabuenae = Leptonycteris yerbabuenae)*, Mexican spotted owl *(Strix occidentalis lucida)*, Sonora tiger salamander *(Ambystoma tigrinum stebbinsi)*, and Huachuca water umbel *(Lilaeopsis schaffneriana* var. *recurva)*. CBD#4

The concurrence includes no discussion and no analysis of the proposed action's effects on the Babocomari River, the confluence of the Babocomari River and the San Pedro River, and the endangered Huachuca water umbel found in the confluence's immediate area. The concurrence includes no discussion of alternatives that would protect and/or enhance the lower Babocomari River's flow, and the resulting benefit for endangered Huachuca water umbel located in the immediate area.

The EA on page ii states,

"Based on known future development plans, the population of Huachuca City is estimated to be approximately 3,600 in the year 2050 and would generate an estimated 360,000 gallons of sewage per day. The majority of this sewage would be produced by the residential sector."

The Arizona Department of Commerce states that the population of Huachuca City is estimated at 1,955 people as of July 1, 2009. The EA fails to examine the action's facilitation/promotion of groundwater dependent growth that cannot take place without the proposed action. No further groundwater-dependent growth can occur without expansion of the Huachuca City's wastewater treatment plant. No expansion is possible without the Aquifer Protection Permit that is dependent upon upgrading of the wastewater treatment plant. The EA does not fully evaluate an alternative recharging the wastewater nearer to its source because "the third alternative, the construction of a wastewater treatment facility was determined to be cost-prohibitive." (See page ii). The CBD#5 CBD#6

EA does not examine these costs in light of the planned non-sustainable, local groundwater-dependent growth requiring an upgrade to Huachuca City's wastewater treatment plant and the single source of funds (Federal). CBD #7

The EA on page 1 states,

> "EPA has used the Army's *Artificial Aquifer Recharge and Treated Effluent Management, Fort Huachuca, AZ* – July 2000 Environmental Assessment and Record of Environmental Consideration (REC) as the basis for the its EA and incorporates these documents by reference."

Incorporation of dishonest, deceitful and illegal DOD documents by EPA does not absolve EPA of its duty to inform the public accurately of the environmental effects of these interconnected and interdependent actions. Incorporation of these documents does not provide cover for EPA to violate the law.

The EA identifies the "Purpose and Need for the Proposed Action" on page 1. It states,

> "...Huachuca City has been facing the need to upgrade its sewage treatment facilities as a part of the compliance requirements for its Aquifer Protection Permit, required by the Arizona Department of Environmental Quality (ADEQ)."

The EA does not recognize that Huachuca City needs an upgrade to its sewage treatment plant in order to accommodate further groundwater-dependent growth resulting in further net loss of water to the San Pedro River. Incompletely mitigated groundwater withdrawal results in a net loss to the River because the groundwater withdrawn is not replaced by an equivalent amount of recharged water. It is always replaced with less. CBD #8

Without recognition that Huachuca City needs an upgrade to fuel its non-sustainable growth in the "Purpose and Need" section, the EA is a sham. It is a lie by omission. It is not legal.

The EA states on page 1,

> "In June 2007, Fort Huachuca received a Biological Opinion from the U.S. Fish and Wildlife Service (USFWS) that requires Fort Huachuca to mitigate approximately 1,000 acre-feet annually (AFA) of groundwater use attributed to it (USFWS 2007)."

The fact that Fort Huachuca must now correct its paper bottom line for recharge does not justify EPA's, or DoD's and fort Huachuca's, violation of NEPA and other laws.

The EA states on page 2,

> "The proposed EPA project is a minor component of the larger recharge project conducted by the Army."

The proposed EPA chosen alternative is an indispensible part of a larger project proposed and partially completed illegally. While the EPA's part of the project may not be the largest element in one of the viable alternatives, it is markedly inter-related with the rest of the project. EPA has now uncovered multiple illegal actions by DOD and

Fort Huachuca that must be remedied if the larger project with EPA's component has any chance of being completed as planned.

The EA states on page 2:

> "The entire system would be designed to accommodate 100 gallons per capita per day of sewage that is anticipated to be generated within the Huachuca City sewage service area. Based on known future development plans, the population of Huachuca City is estimated to be approximately 3,600 in the year 2050 and would generate an estimated 360,000 gallons of sewage per day. The majority of this sewage would be produced by the residential sector."

Where is the analysis that this action facilitates nearly 100% increase in groundwater-dependent growth locally in Huachuca City that would not occur otherwise? The EA fails to provide this analysis. And then there is the surreptitious tiering of airport development that must be analyzed in the light of day to pass NEPA muster. CBD #9

The EA states on page 2:

> "To power the force main with 100% renewable energy, a system 21x larger, or a 321 kW system, would be needed."

Where is the analysis about the cost of electricity and the carbon offsets required for the life of the selected proposed alternative versus the cost of an alternative featuring a local treatment plant? DOD and Fort Huachuca should help fund such an alternative and should expect water budget credit in return. CBD #10

The EA states on page 4:

> "Three alternatives were considered in the development of this EA; however, only the Proposed Action and the No Action Alternative were evaluated. The other alternative was eliminated from further consideration."

This violates NEPA requirement to explore a full range of alternatives particularly given the fact that the project intends to promote, facilitate and support non-sustainable, groundwater dependent growth in Huachuca City and beyond (i.e., airport development, Babocomari Place development, etc.) CBD #1

The EA states on page 5:

> " Upon the completion of project construction, wastewater would be permanently redirected from the existing ponds to the new pond."

Where is the examination of the effect of closing these ponds on the lower Babocomari River, its confluence with the San Pedro River, and endangered Huachuca water umbel? This analysis is particularly timely given the fact that the San Pedro River north of Charleston is becoming increasingly imperiled. Recent affidavits from US Bureau of Land Management (BLM) official confirm this fact and vulnerability. These affidavits are now attached to assure their critical information and data becomes part of the record. CBD #1

The affidavit from BLM hydrologist Paul Brown states,

"A trend line plotted though the data shows that summer stream flows (base flow) have decreased markedly and to critical levels...Winter base flows may reach zero as soon as 2010 (Stromberg and others 2009). Base flows are essential for the riparian ecosystem sustaining riverine march vegetation, fish, and other aquatic organisms, in addition to providing drinking water to wildlife."

The affidavit from BLM fish biologist Jeff Simms states,

"...There is a clear danger of surface flows decreasing to the point that fish will be lost from public lands along the Charleston reach of the river. This danger is now acute (figure 1). The river at the Charleston gage has already registered an absence of flow in 2005 and nearly no flow (a few gallons per minute) in subsequent years. The fish have returned to this reach by surviving in isolated pools until rescued by summer rain storms. The trend for increasing area of dry riverbed clearly will not support aquatic life. This trend has been observed for over twenty years."

This analysis is also particularly important given the fact that the Upper San Pedro Partnership has no chance of achieving its promise to balance its water budget by 2011.

The EA states on page 7:

" After evaluating the wastewater treatment plant alternative (Alternative 3), it was determined that this option would not be a reasonable nor practical approach to the treatment of Huachuca City's wastewater. "

Why was it "determined that this option would not be a reasonable nor practical approach to the treatment of Huachuca City's wastewater"? in reality, the true, unstated reason is that DoD/Fort Huachuca has surreptitiously misspent $7.5 million on the project already without a lawful analysis. And why does EPA believe that Huachuca City is exempt from paying for its non-sustainable impacts? CBD #13 CBD #14

We have a highly controversial situation here. Full examination and full disclosure is necessary and is a legal requirement.

The EA states on page 9:

"...A future development, Babocomari Place, is anticipated for the northeast corner of SR90 and the Babocomari River. While this development is outside Huachuca City's corporate limits, it is planned to be included in the town sewer system. This development is anticipated to have 160 lots and house approximately 320 residents."

Why are tax dollars being used to subsidize, facilitate and support non-sustainable, San Pedro River-damaging, groundwater dependent growth?

The "climate" section falls to address climate change related issues. Local recharge near source would have less negative impact on climate change. CBD #15

Base flows in the Babocomari and the San Pedro Rivers will be increasingly affected by climate change. Climate change also makes the removal of recharge from the source of its original water even more controversial.

The EA states on page 11:

> "By design, these ponds are separate from and do not interconnect with the Babocomari River."

Where is the data supporting this statement? In reality, leaching from the ponds is occurring. The amount and the effects of this water on sustenance of the Babocomari is not evaluated by the EA. This is not lawful. CBD#16

The section "Groundwater Resources" is inadequate, and insultingly non-professional. The San Pedro River is in deep trouble. The only controllable variable is the control and/or mitigation for the area's non-sustainable, excessive groundwater-dependent growth.

Recent scientific presentations to the Upper San Pedro Partnership attribute increased importance to the regional aquifer's supply of water to the River. This makes maintenance of peripheral base flow-sustaining groundwater even more important. This makes local recharge and the non-removal of recharge from the immediate source area even more important.

The EA mentions but does not analyze the critical short term importance of strategic recharge. The proposed action, not only promotes and accommodates additional non-sustainable, groundwater dependent growth, it moves recharge water away from an area where it is critically needed. CBD #17

The EA states on page 12:

> "Connecting the Fort Huachuca WWTP to the Huachuca City wastewater storage pond could almost double the amount of water available for recharge."

Is not the more realistic figure approximately 200 ac/ft per year without greatly increasing the about of groundwater pumped? This is a deceptive way of evaluating the situation. Even with recharge, all groundwater pumping in the region results in significant loss of water that would otherwise provide water to the San Pedro River.

A more accurate evaluation must discuss the fact that the DoD is willing to spend huge amounts of money to improve Fort Huachuca's paper water budget, no matter law or logic. A more accurate and legally defensible NEPA study would evaluate range of alternatives most important of which would be local recharge.

The section "3.12 Endangered or Threatened Species and Critical Habitat," fails to discuss and analyze (1) the effects of the project's promotion of non-sustainable, groundwater dependent growth, (2) the effects of the withdrawal/transfer of rechargeable water from the area of its source, (3) the effects of likely further degradation of Huachuca water umbel Critical Habitat along the Babocomari River and (4) effects resulting from the close proximity of the project to the known endangered Huachuca water umbel found near the confluence of the Babocomari and the San Pedro Rivers. CBD #18

The section "4 EVALUATION OF IMPACTS" ignores all effects identified as deficient above. In addition, it fails to evaluate the full range of alternatives probably by succumbing to the questionable financial rationale already identified. CBD#19

The EA states on page 20:

"On 21 November 2008 the USFWS concurred that the proposed construction and operation of the new ponds, force main, and lift stations would have no effect on the Mexican spotted owl, Sonora tiger salamander, and Huachuca water umbel because the semi-desert grasslands along the pipeline route do not provide habitat for these species."

FWS' concurrence is consistent with its habitual lack of professionalism and motivation to fully evaluate any San Pedro River-threatening project. At least, FWS did not try to again limit the scope of its evaluation to an artificial and contrived 10-year period like it did in the BO (2007). The major effects are not along the pipeline route. As already identified, the major effects of this action involve (1) the facilitation and promotion of San Pedro River-damaging, non-sustainable new groundwater-dependent growth, including the transfer of airport land from Fort Huachuca to the City of Sierra Vista and its resulting growth, and (2) removal of recharge water from its local source and area of need. CBD#20

We will address and challenge FWS inadequate and unlawful concurrence under separate cover.

The EA states on page 20:

"The concurrence letter is attached in Appendix A."

The EA that is publicly available via the EPA website does not include an Appendix A. (http://www.epa.gov/region09/nepa/epa-generated.html)

The EA states on page 20:

"The Proposed Action would potentially result in indirect **beneficial** impact on threatened and endangered species and critical habitat that occur along the San Pedro River. Increasing the amount of water that is recharged into the aquifer is anticipated to have a positive correlation with baseflow of the San Pedro River. A portion of the recharged water would be available for capture by pumping wells reducing the capture of natural discharge (e.g., discharge to streams) by these same wells. The reduction in capture of natural discharge could result in enhanced habitat conditions along the river."

As already mentioned, the proposed project will result in the facilitation and promotion of San Pedro River-damaging, non-sustainable new groundwater-dependent growth, including the transfer of land from Fort Huachuca to the City of Sierra Vista and its resulting growth. Again, the EA fails to discuss and recognize the fact that all groundwater pumping in the area results in decreased base flow in the river because recharge cannot replace the water to the same degree of withdrawal.

The EA states on page 21:

" The Proposed Action is not anticipated to affect the rate of population growth and consequently result in an increased demand for groundwater. The existing wastewater facility in Huachuca City, while out of compliance with its aquifer protection permit, is operating below its maximum capacity. Growth in the region could occur regardless of the completion of the proposed project. While increased aquifer recharge improves available water within the watershed, offsetting water use is only mandated at Fort Huachuca as a result of its PBO.

Growth within the Fort is not affected by this action as any new activity that occurs on Fort Huachuca is required to fund projects or portions of projects that offset any increased water use associated with it."

The statement that the "Proposed Action is not anticipated to affect the rate of population growth and consequently result in an increased demand for groundwater," is simply not true. As stated already, non-sustainable, groundwater dependent growth will not happen in Huachuca City without a new wastewater treatment plant. The development of the airport area will also not occur without infrastructure and subsidized support such as that being provided by the proposed project. CBD#21

Non-sustainable, groundwater dependent growth will continue only as long as it is facilitated by unlawful, non-science based agency actions similar to those criticized here. Inadequate and non-sustainable infrastructure is a limiting factor to the non-sustainable, groundwater-dependent Huachuca City growth. It is also limiting to the airport development.

Fair analysis and compliance with applicable law by EPA and FWS should also result in more sustainable growth outside of the Fort's boundaries. Deceptive and illegal support for growth outside the Fort's boundaries is primary the reason that the growth continues. Huachuca City cannot continue to grow without mitigation if they are denied the support and subsidies provided by the proposed scheme. Huachuca City cannot continue its groundwater-dependent, non-sustainable without an Aquifer Protection Permit. Airport development will similarly not occur without federal support and subsidy.

Continued excessive, non-sustainable growth by the Fort is affected by this action because the proposed alternative serves primarily as a mechanism to manipulate the Fort's paper water budget to accommodate the growth. And while the statement that "Fort Huachuca is required to fund projects or portions of projects that offset any increased water use associated with it" is true in principle; in practice, this statement is a lie by omission. Nobody knows if Fort Huachuca is offsetting its growth as there is currently no accounting and no oversight by the FWS, even though lawfully required.

In spite of repeated appeals for an accounting of Fort Huachuca's increasing personnel and money, these efforts have resulted only in partial oversight success. While we can now prove the presence of a massive increase in local DOD expenditures, we have not been able to accurately assess the extent of the Fort's increasing personnel numbers resulting from the expenditures.

The BA (2006) for the current BO (2007) cites Fort Huachuca's FY2001 Economic Impact Statement as its most up to date data source for direct economic expenditures in Cochise County. The recently secured FYI 2008 Economic Impact Statement shows $921.8 million in direct Cochise County expenditures for FY2008. The FY2001 Economic Impact Statement shows $528.0 million in direct Cochise County expenditures for FY2001. This represents an increase of direct local expenditures of 75% since the BA (2006)/BO (2007). The FY2005 Economic Impact Statement shows $830.6 million in direct Cochise County expenditures for FY2005. This represents an increase of direct local expenditures alone of 11% or $91.8 million/year from FY2005 to FY2008.

It is not true that the "existing facilities...do not pose a limit on Huachuca City's capacity to grow." Failure to secure a valid Aquifer Protection Permit will result in an inability to allow more sewer hook-ups. The rest of this section is a verbatim repeat from page 21. It has been addressed. CBD #24

The EA states on page 26:

> "Due to the very limited change in existing conditions that would occur as a result of the Proposed Action, it is anticipated that the Proposed Action would not result in any direct or indirect impacts to the climate."

The unnecessary, indefinite pumping of wastewater approximately eight miles and 435 feet uphill and the requirement for a predicted 1,463 kWh/day electricity have not been analyzed as an unnecessarily excessive use of carbon based energy. The proposed solar panels only reduce the requirement by "less than 5%."

The EA states on page 28:

> "Energy Use...Electrical use to operate the force main is estimated to be 1,463 kWh/day. If we assume, however, that reclaimed water generated from the treatment of Huachuca City's wastewater at Fort Huachuca's existing wastewater treatment plant will offset groundwater demand, electrical use by Fort Huachuca from groundwater pumping could decrease."

This statement is not logical since the water to be moved from Huachuca City to Fort Huachuca is supposed to be recharged not consumed.

On page 28, the EA is summarized. The summary ignores the facts, that among other concerns, that the proposed action fails to evaluate local effects, fails to evaluate alternatives, fails to evaluate the promotion of a net increase in deficit groundwater pumping, and fails to acknowledge the flawed basis of the tiered documents.

The inaccuracies in the summary table, Table 1, have already been discussed. Most importantly though, we again find EPA's inaccurate summary conclusion on pages 29 and 30 that,

> "Indirect beneficial impact resulting from an increased recharge to the aquifer contributing to improved baseflow of the San Pedro River. Potential reduction in the capture of natural discharge could result in enhanced habitat conditions along the river."

This conclusion is not defensible given any evaluation of the amount of growth promoted, facilitated and accommodated by the proposed project. The shortcomings regarding the table's subjects of "groundwater resources," "environmental sensitive areas," "socioeconomics," and "utilities" have already been addressed.

On page 32, the fallacy of that the proposed project is beneficial by "helping to address a regional groundwater deficit and potentially reducing the capture of natural discharge that supports baseflow of the San Pedro River" has already also been addressed.

The section on pages 32 and 33, "CUMULATIVE IMPACTS" must be addressed directly though because it is so summarily inaccurate and so unlawful. The section states,

Fort Huachuca refuses to release accurate and current personnel data. FWS refuses to demand compliance with yearly local impacts in spite of yearly oversight accounting mandate; however, on April 23, 2010, we did finally get a glimpse. In April 23, 2010, Sierra Vista Herald (See "Custer talks about Army's evolution," Bill Hess, Sierra Vista Herald, April 23, 2010), Fort Huachuca's Maj. Gen. John Custer, said,

> "...the number of soldiers being trained at the center on the post has increased from 8,500 in 2001 to nearly 22,000 this year."

This represents a 159% increase in students at Fort Huachuca's the Intelligence Center of Excellence from 2001 to 2010!

The EA states on page 22,

> " The nearest environmental sensitive area to the proposed activities is the Babocomari River, located immediately north of the project. Construction of the proposed pond and maintenance building would occur partially within an existing unused pond located south of the ponds that are in use. No erosion or discharge to the Babocomari would occur given the physical barriers (existing holding ponds) between the area to be disturbed and the river. Likewise, the SPRNCA would not be adversely affected by the project. The proposed activities would have no direct or indirect impact on the river."

Currently there is leakage from the Huachuca City wastewater treatment ponds. The leaked water is undoubtedly providing base flow to the Babocomari. Any compulsive and lawful NEPA evaluation would quantify and evaluate the significance of this water before removing it. CBD#22

This is an area of national importance (SPRNCA). This is an area with dependent endangered species and Critical Habitat in close proximity. The EA does not provide a lawful evaluation worthy of an important area.

The statement that, "...the SPRNCA would not be adversely affected by the project. The proposed activities would have no direct or indirect impact on the river" is simply not true. Where is the data in the EA? It does not exist. CBD#23

The EA states on page 25:

> "The purpose of the Proposed Action is not to increase the capacity of the existing sewer service, but to bring it into compliance with state Aquifer Protection Permit requirements. The existing facilities are only being used at a fraction of their capacity and do not pose a limit on Huachuca City's capacity to grow. ***Growth within Huachuca City is anticipated regardless of this project. However, this project would ensure that the wastewater generated is properly stored and treated. While the increased amount of water available for recharge would help reduce the impact of growth that may occur in the communities within the watershed, offset of groundwater use is not mandated for Huachuca City. Conversely, offsetting water use is mandated for Fort Huachuca as a result of its PBO. Growth within the Fort is not affected by this action as any new activity that occurs on Fort Huachuca is required to fund projects or portions of projects that offset any increased water use associated with it."

" Overall, the impacts associated with the Proposed Action are minor and many are of limited duration. No significant cumulative impacts are anticipated to occur, even when these impacts are considered in combination with the impacts associated with other projects."

Any lawful cumulative impacts analysis must examine the facilitation and the support for increased non-sustainable, groundwater-dependent growth, including, but not limited, to Huachuca City, the airport development and the massive increase in DOD local expenditures.

Summary

The unlined Huachuca City sewage ponds currently provide source water to the lower Babocomari River. Endangered Huachuca water umbel is found near the confluence of the Babocomari River and the San Pedro River. The EPA, DOD, and FWS have yet evaluated the quantity of water supplied by the sewage ponds to the Babocomari and the confluence of the Babocomari and San Pedro Rivers. No studies have been undertaken to determine the effects of removing the wastewater from its source area. No defensible studies have been undertaken to evaluate the costs and benefits of processing and recharging the source water locally instead of pumping the sewage up 435 feet in elevation over 8 miles in distance from the City to the Fort using approximately 1,463 kWh/day to pump.

Now that the facts surrounding this proposed project are finally coming to light, one cannot help wonder why DOD is willing to secretly and unlawfully undertake such a massive and significantly expensive infrastructure project in order to take credit for such a relatively small amount of recharge. Something is amiss, particularly when DOD still endeavors so diligently to deny responsibility for its near total support of the non-sustainable, groundwater-dependent local population in the Sierra Vista Sub-watershed.

Please advise us of your decision to either finalize this sham of a NEPA document or your decision to produce a complete, accurate and lawful study. Since (1) this project facilitates and supports a significant increase in non-sustainable, groundwater-dependent growth, including, but not limited, to Huachuca City, and the airport development (significant environmental effect), (2) since this EA has exposed Fort Huachuca's attempted unlawful cover-up of major construction activities (controversy), (3) and since this EA and its tiered documents, are so generally inaccurate, incomplete, and unlawful, we expect that a full and open Environmental Impact Study will be undertaken.

If you have any further questions, please do not hesitate to contact me, via phone (602) 799-3275, by email, rsilver@biologicaldiversity.org, or by mail, Center for Biological Diversity, PO Box 1178, Flagstaff, AZ 86002.

Sincerely,

Robin Silver, MD

[1] Multiplier calculations based on the Economic Impact Forecast System developed by the U.S. Army Corps of Engineers Construction Engineering Research Laboratory (CERL)(Ft. Huachuca 1999), and based on U.S. Census data. (Census 2000) CERL uses the multiplier "2.3" for a household-size multiplier and "1.684" for a local economic multiplier. The U.S. Census Bureau, however, has found the local household-size greater than that from CERL. According to the U.S. Census Bureau (Census 2000), the household-size for Cochise County equals 2.55. In Huachuca City, it equals 2.43, in Sierra Vista 2.48, and in Sierra Vista Southeast 2.65. (Census 2000) In an attempt to be as accurate as possible, we use CERL's local economic multiplier of 1.684 and the most recent U.S. Census household-size multipliers ranging locally from 2.43 to 2.65. Both the CERL and the U.S. Census multipliers do not include family members of support workers, and therefore consequently still underestimated total impacts.

Huachuca Audubon Society

P. O. Box 63

Sierra Vista, AZ 85636-0063

TO: Charlotte Ely
ely.charlotte@epa.gov
U.S. EPA, Region 9
75 Hawthorne Street (WTR-4)
San Francisco, CA 94105

Huachuca Audubon Society is pleased to submit the following comments to the Environmental Protection Agency on the Environmental Assessment (EA) for the Huachuca City Sewage Ponds and Force Main Project.

Huachuca Audubon Society is an all-volunteer organization located in Sierra Vista, Cochise County, Arizona. For more than 40 years, the society has been involved in environmental concerns in the area, with particular focus on protecting the San Pedro River riparian habitat.

GENERAL COMMENTS

We were surprised to find only one alternative analyzed in the EA, in addition to the baseline No Action Alternative. Another alternative was mentioned as having been considered but immediately eliminated. Is this even in compliance with NEPA, to have only one viable alternative given a full evaluation? HAS #1

An alternative that occurred to us, similar to the one mentioned as having been rejected, would have been to have Fort Huachuca construct, operate and maintain a small treatment plant on federal property but at the base of the hill. Apparently this could have been constructed for about the same cost as the pipeline and lift stations but almost certainly lower annual maintenance costs. Had this EA been done properly in advance of actual construction, perhaps such an alternative could have been given consideration.

A small treatment plant near the Huachuca City ponds would have eliminated the need for 40,000 feet of pipeline and presumably all 3 lift stations. It presumably also would have reduced what is a fairly impressive electrical need to run the lift stations and pipeline, namely an estimate of 1,463 kWh/day. That's a lot of electricity and around here that's a lot of coal to burn and a lot of greenhouse gases being emitted. [For comparison, that's more electricity in one day than my household uses in 4-5 months.]

It strikes us as strange that an EA is being done for a project that is 75% or more already complete, namely all the construction on Fort Huachuca property. Isn't this a contradiction for what an assessment is supposed to be? HAS#2

And finally, we think a FONSI is an inadequate and inappropriate conclusion for the project and we request that an Environmental Impact Statement be prepared. HAS #3

COMMENTS BY SECTION

In Section 1.1, there is reference to the system being designed to accommodate 100 gallons per capita per day (gpcd) of sewage, the majority of this being produced by the residential sector. This seems like a high per capita figure for this area. Are there records that provide the basis for this assumption? In much of the subwatershed where household consumption is known, the indoor water use figure is likely to be closer to 60 or 70 gpcd. HAS#4

In Section 2.3, in discussing the potential costs of treatment, the Town Clerk for Huachuca City is cited as saying the average household sewer fee is $12/month, which represents the cost for 3,000 gallons per month. That represents 100 gallons per day per household, not per person. Households appear to be estimated at 2 people per household for Huachuca City. So Section 2.3 appears to reference a usage figure that is half of what is cited in Section 1.1 as gpcd. Can you please clarify the gpcd computations and assumptions used in these section. HAS #5

Also in Section 1.1, this same apparently high gpcd is used to extrapolate out to estimated sewage based on estimated population in 2050, presumably to justify the capacity need. Is this figure apparently twice what it should be or needs to be? And if efforts at further water conservation and efficiency are effective in the area, how might that projection for effluent available for recharge be modified? HAS #6

In Section 1.1, the energy requirements to operate the force main and lift stations are predicted as 1,463 kWh/day. While this seems like a lot, there is no reference provided as to whether this represents a negligible 1% increase or a more significant 10% increase in the current total Fort Huachuca electrical consumption. Please provide context information on electrical usage. HAS #7

In Section 2.1, under Sewage Lift Stations, we wonder about the need for the Huachuca City sewage to remain "wet". In other words, will working towards better water efficiency in Huachuca City be viewed as counterproductive because it would become problematic to pump sewage that is more solid uphill 435 feet? HAS #

In Section 3.12, there is an admission that biological surveys of the existing sewage treatment ponds were not done. While it may indeed seem unlikely that they have much habitat value, wildlife was reported as being observed in a reconnaissance survey. Huachuca Audubon Society members have observed birds on and near the ponds in years past. Is this an acceptable standard for producing an EA, that no survey was done? HAS #

In Section 4.19, the point is made that the proposed action will not increase sewage capacity or facilitate growth. Nevertheless, there surely are constraints on Huachuca City growth while they are not in compliance with their Aquifer Protection Permit. At some point, some state agency (ADEQ perhaps) might have to get serious about not allowing new sewer hookup and thereby limiting growth. This proposed action, using a lot of federal dollars, would solve that problem. Future growth will benefit from the solution without having to pay for the solution. Is there any plan to recover any costs from this privatized benefit?

Tricia Gerrodette
Conservation Committee Chair
Huachuca Audubon Society