

could cause frequent collapses of the electric network. This, in turn, would adversely affect Puerto Rico's economy. Unless the Corps officially disagrees with this understanding of the Via Verde scope for an alternatives analysis, as approved in the FEIS back on November 30, 2010 by the EQB, and officially notifies PREPA that additional review is required, *Gasoducto del Sur* will not be discussed further.

Finally, PREPA would submit the following as additional information regarding the "No-Action Alternative" since there was some critique of this option's write-up.

No-Action Alternative

The No-Action Alternative would result in not constructing the project. The No-Action Alternative would eliminate the short- and long-term project environmental impacts identified in the resource reports. However, selection of the No-Action Alternative would mean that the energy supply benefits of the project would either go unrealized or would have to be accomplished through other means with potentially greater environmental impacts elsewhere. A no-action alternative although required under the state EIS regulations, is not germane to the alternatives analysis under the Clean Water Act 404 (b) (1) guidelines because it is, by definition, inconsistent with the overall purpose of the project, and therefore not a practicable alternative.

The No-Action Alternative does not achieve the stated overall purpose of the project, which is to deliver an alternate fuel source to three existing electric power generating facilities located in Arecibo, Toa Baja and San Juan Steam plant operated by PREPA. If adequate supplies of natural gas are not available, PREPA would have forced to maintain the existing dependency on the use of petroleum derived fuels resulting in potentially more costly and environmentally damaging fuels options, with their deleterious local economic consequences. Alternative approaches to finding and delivering sources of energy to supply the growing demand for electricity in the Puerto Rico present very real adverse environmental impacts and are neither superior nor preferable to the proposed project. Moreover the Via Verde project is consistent with the Energy Diversification Policy developed for Puerto Rico by the Administration of Energy Affairs.

National Marine Fisheries Service (NMFS):

The following is information developed in response to the NMFS request for additional information.

Issues –



1) Please clarify what is meant by "ALL wetland impacts will be temporary". The proposed ROW of 150 feet seems to imply that impacts to wetlands are not temporary.

RESPONSE: As the statement implies, all impacts associated with the construction of the pipeline will be temporary in nature within wetlands and other surface waters. After the construction and installation of each pipeline segment, all wetlands and surface waters will be restored to their original pre-construction state and will be allowed to naturally recruit with native species.

The proposed right-of-way (ROW) is necessary only for the purposes of entitlement. PREPA will have entitlement rights for the entire ROW. Maintenance and new access roads will not be necessary within wetlands or other surface after completion of construction. All maintenance in wetlands and other surface waters will be conducted using a computerized robotic system identified as PIG. PIG launchers and receivers will be located outside wetlands and other surface waters. It will allow the data gathering efforts as well as the identification of any area where additional preventive or regular maintenance efforts are required.

2) Based on the answer to #1, please provide the total square footage of resource impacts (seagrass, other submerged vegetation, mangroves and other benthic resources). The public notice indicates a total of 28.5 acres of EFH will be impacted but does not indicate the acreage for each habitat type.

RESPONSE: The following is a breakdown of proposed temporary impacts to wetlands and other surface waters:

• Canals	0.67 acre
• Canals with Mangrove shorelines	0.00 acre
• Estuarine Forested- Mangroves	0.00 acre
• Estuarine- Supratidal Saltflat	0.56 acre
• Rivers, Creeks, Tributaries	1.39 acres
• Unnamed Creeks (in Karst Region)	0.90 acre
• Ditches (within herbaceous wetlands)	0.08 acre

Our calculated total temporary impact to EFH is approximately 3.8 acres. Forested estuarine habitat will not be impacted because Horizontal Directional Drilling (HDD) will be utilized in those systems.

3) Please provide additional explanation that can help us determine if HDD will be utilized with encountering "Estuarine Forested Wetland" and the other types of EFH habitats, such as seagrasses and submerged vegetation. This would help NMFS evaluate alternatives to the proposed action.

RESPONSE: Table 7 of the JPA Report, which was submitted with the Joint Application, has been modified. The table includes only those temporary impacts



associated with potential EFH impacts. The crossing methods, including HDD, are identified for each habitat type. Type 1= HDD, Type 2= Open Cut Waterbody Crossing, Type 3= Open Cut Waterbody Crossing (Minor Waterbody), and Wetland= Open/Box Cut Crossing.

4) *Please provide results of an actual survey of the organisms in the estuarine areas that the proposed project impacts.*

RESPONSE: Results from the Flora and Fauna study conducted by Coll Environmental were included in the Joint Application Package. Additionally, surveys are currently being conducted at the request of USFWS. Any further survey results that involve estuarine organisms will be provided promptly upon completion.

U.S. Fish and Wildlife Service (USFWS):

Before addressing USFWS specific comments included in the December 15, 2010 letter, it is important to point out that comments presented were based on the Draft of the EIS (Sept. 9, 2010) and not on the FEIS approved by the EQB on November 30, 2010. However in an effort to address them out we are presenting the following comments, clarifications and responses aimed to address pertinent issues pulled from the aforementioned USFWS letter.

Issues –

1. Purpose of the Project, Single and Complete Project, Federal Involvement and compliance with the National Environmental Policy Act (NEPA)

- The PN fails to discuss necessary changes to EcoElectrica's currently authorized facilities and operations to supply natural gas to PREP A's three facilities in the north. Because the Via Verde pipeline would require additional storage and modifications to the EcoElectrica terminal, these projects are interrelated and should be viewed as one single and complete project. Should EcoElectrica fail to obtain FERC authorization for the physical and / or operational modifications that might be necessary to serve the pipeline, the Corps would be permitting a fragment of a project that could not fulfill the stated purpose and need and would have irreversible resource impacts.

RESPONSE: Additional modifications to the EcoElectrica terminal which may be required to provide natural gas to the Via Verde project have previously been reviewed and permitted by Federal Energy Regulatory Commission (FERC) during 2009 as parts of past projects. These modifications to be completed during the last quarter of 2011 can be constructed independent of the existence of the Via Verde project. The overall project purpose is to deliver an alternate fuel source, which already



exists at the EcoElectrica terminal, to the three existing electric power generating facilities located on the north coast of Puerto Rico. This will allow PREPA to select based on power demand and heat rates characteristics the most efficient unit to be utilized to meet the daily power generation demands to be serviced by PREPA.

- This project should be evaluated as a major construction activity since it would affect about 1,672 acres of land, including about 369 acres of wetlands, several Commonwealth Forests or Reserves, forested mountain and karst areas, and known habitat for more than 30 federally listed threatened or endangered species.

RESPONSE: The proposed project will result in only temporary impacts to approximately 152 acres of waters of the U.S. (WoUS) with no permanent fill or net loss. This is derived from multiplying the length of each expected jurisdictional crossing by the 50-foot width the contractor will operate within when locating the pipeline in WoUS. The limits of the project area (1,672 acres of land) reflect the limits of an enlarged utility right-of way (ROW) to be established for safety purposes. The ROW is required to ensure that no future encroachment occurs adjacent to the gas transmission line and should not be construed as cleared ROW corridor such as that required for a transportation project. All but 50 feet of this ROW will be allowed to naturally revegetate to preconstruction conditions and at the same time areas located in up lands will be utilized to plant trees as part of the Mitigation efforts required by the Department of Natural & Environmental Resources (DNER). Within the remaining 50-foot zone, only deep rooted vegetation, i.e. large trees, will be restricted. As such, the applicant questions how the Service has determined the project constitutes a "major construction activity or the criteria's utilized to reach such conclusion."

Surveys for federally Threatened and Endangered species that may be present in the project area, have been carefully refined to address species of concern and key habitat areas through several meetings with the Service. Presently, field surveys (including the participation of USF&WS personnel) are being performed (utilizing regional experts and protocols approved by the USFWS) within the project ROW. These surveys have been and continue to be closely coordinated with the USFWS to ensure that all species of concern (flora and fauna) are assessed. To date, no threatened and endangered plant species have been identified and only six faunal species of concern have been identified; two of which (PR Nightjar and PR boa) have been positively identified as occurring within the ROW. Surveys for the following six species remain on-going; Puerto Rican (PR) broadwinged hawk, PR sharp-shinned hawk, PR crested toad, PR Nightjar, PR Boa, and the Coqui Illanero.



2. Alternatives Analysis

- The applicant's alternative analysis does not include PREPA's original plan to build a new natural gas combined cycle power plant close to the existing Costa Sur facility, and to retro fit both Costa Sur and Aguirre power plants to use natural gas. This was the applicant's preferred alternative in the past and now is not mentioned in the applicant's alternatives analysis.

RESPONSE: The overall project purpose is to deliver an alternate fuel source to the three existing electric power generating facilities located on the north coast of Puerto Rico. Attempting to use the *Gasoducto del Sur* would be inconsistent with the overall purpose of the project, and therefore is not a practicable alternative. It is not practicable because generating most of the energy the island needs on the south coast would create a situation which destabilizes the electrical system and could cause frequent collapses of the electric network. This, in turn, would adversely affect Puerto Rico's economy. Also, at the time the *Gasoducto del Sur* was considered, natural gas prices were similar to those of Bunker C. This meant the conversion of the South Coast Plant units would not be practicable. Therefore, converting the Aguirre's Combined Cycle was selected because natural gas would replace the more expensive and polluting Diesel Fuel. With natural gas prices plunging, even lower than Bunker C prices, it is preferable today to convert the Bunker C fired units which have a greater generating capacity. Today, with the South Coast completely converted to natural gas, and the geographical limitations imposed by our electric system, Aguirre's conversion is not a priority for PREPA, and is therefore not considered as part of Via Verde. Unless the Corps officially disagrees with this understanding of the Via Verde scope for an alternatives analysis, as approved in the FEIS back on November 30, 2010 by the EQB, and officially notifies PREPA that additional review is required, *Gasoducto del Sur* will not be discussed further.

The alternatives analysis provided reflects and supports the project purpose and scope provided in the current Joint Permit Application presently under review by the USACE (SAJ 2010-02881 (IP-EWG), Via Verde Pipeline Project. PREPA's previous plan to build a new natural gas combined cycle power plant close to the existing Costa Sur facility, and to retrofit both Costa Sur and Aguirre power plants to use natural gas are not part of this project and is not being considered. Moreover the construction of a combine cycle plant close to the existing Costa Sur facility is a project that will be developed by a private entity to be selected under an independent bid process being developed by the Private Public Alliance Office outside the PREPA.

3. Habitat Impacts

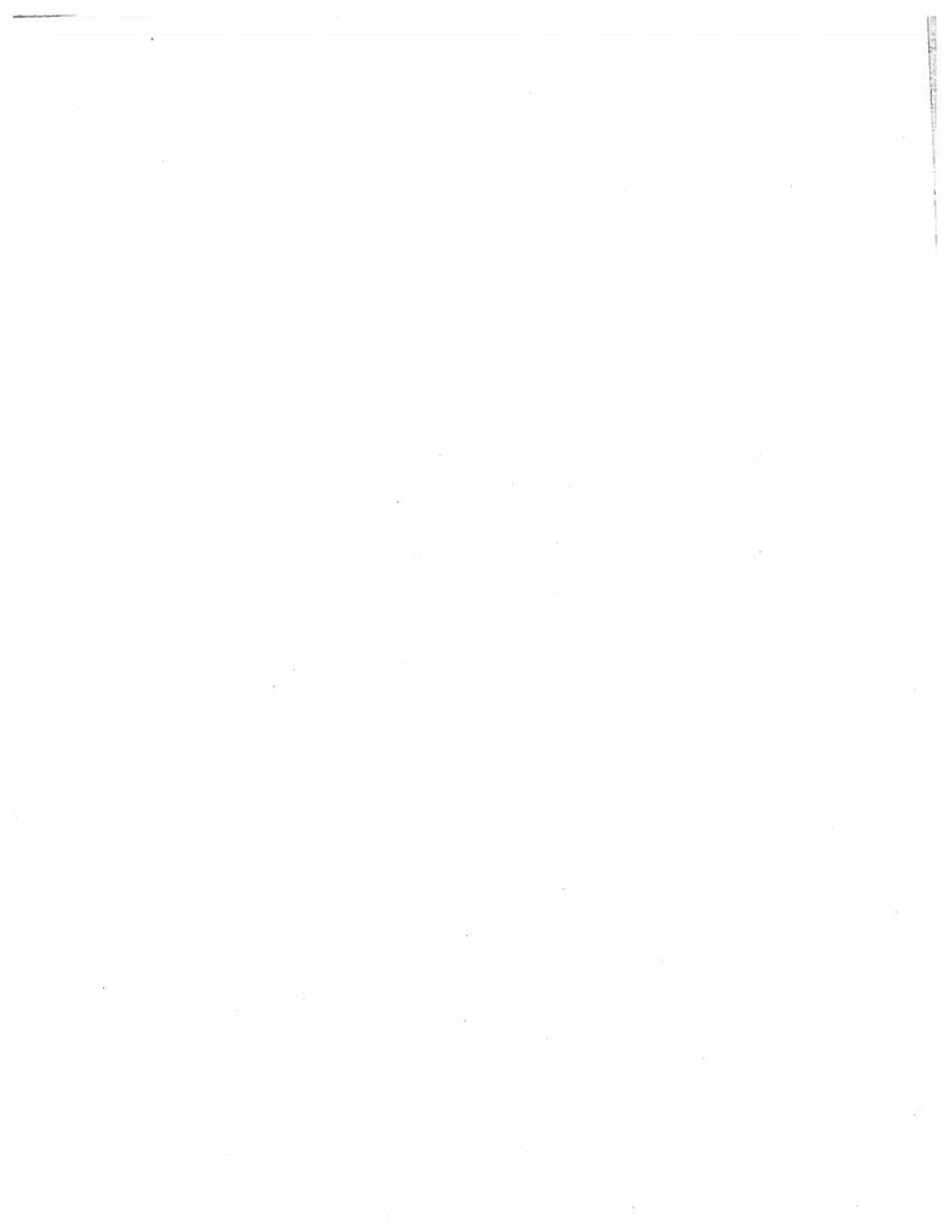
- The construction right of way (ROW) width ranges from 100 to 150 feet, and more if needed, with a final permanent ROW of 50 feet. The "Declaracion de Impacto Ambiental Preliminar"(DIA-P) states that all vegetation within the construction ROW will be cut and that the permanent 50 foot ROW will be maintained as a no-root zone with no woody vegetation. The DIA-P does not propose mitigation for impacts to previously undisturbed forested areas in this long corridor that will create an avenue for invasive and noxious species to enter previously isolated areas of wildlife habitat. The DIA-P also does not describe methods for maintaining a 92-mile, 50-foot-wide no-root zone corridor through karst and mountainous topography.

RESPONSE: The no-root zone was incorrectly described in the DIA-P and has subsequently been revised in the FEIS approved on November 30, 2010 by the EQB. The original right-of way (ROW) design allowed for only shallow rooted herbaceous and/or shrub vegetation within the permanent right-of-way. PREPA as clearly indicated in the FEIS will be utilizing the ROW to implement the Mitigation Plan requested by the DNER. This concept has since been modified to allow for the natural recruitment of all native vegetation (herbs, shrubs, and trees) within the ROW corridor. Only within the 50-foot zone immediately above the pipeline will vegetation be regulated to restrict the growth of deep rooted trees.

All inspections and light maintenance of the pipeline will be conducted internally, using a remote controlled robotic pipeline inspection gauge (PIG). PIG launchers and receivers will be located outside wetlands and other surface waters, typically in disturbed upland areas within the project ROW. If surface supported maintenance is required for any section of the pipeline, only vegetation clearing in that limited area will occur. The area would then be allowed to naturally recruit or be reforested as part of the Mitigation Plan developed.

- The Service is concerned that the clearing of all vegetation in the 150 foot ROW as stated in the DIA-P, in areas of highly erodible or unstable lands would cause excessive erosion that could impair water quality and channel stability in streams and rivers along the route. Trenching is likely not feasible in many steep areas within the corridor, yet DIA-P includes no discussion of how these areas will be traversed.

RESPONSE: We must advise that all comments included in the USFWS were based on the evaluation of the first Draft of the EIS and not on the evaluation of the FEIS approved by the EQB on November 30, 2010. Sediment and Erosion control methods will be utilized throughout the construction of the pipeline to prevent excessive erosion that could impair



water quality and channel stability in streams and rivers along the route. Specific information related with the sediment control options is included in section 6.4.2 of the FEIS. We must alert the USF&WS that the sediment control options were developed utilizing criteria's that had being approved by the EQB and the EPA in the past for similar projects and that had met and address all the USF&WS concerns in this particular area.

- Generalized drawings as seen on sheet 2 of the PN do not clearly represent what is written in the DIA-P. The proposed permanent 50 foot ROW and its associated no root zone will require either mechanical or chemical maintenance, which implies construction of a permanent maintenance road with associated stream crossings along most of, if not the entire, ROW length. This is not addressed anywhere in the documents. Utilizing the full estimate of ROW impacts should also help account for staging areas along the project route.

RESPONSE: As previously stated, the proposed pipeline does not require a no-root zone. At no point was it implied that permanent maintenance roads will be required for any water body crossing; stream, wetland, river, or otherwise. A permanent maintenance road has never been considered as part of the project and there is no plan, intent or need for such a road. After the pipeline is built, PREPA will use alternative methods, such as helicopters, to reach remote or isolated sections of the project. The idea of a "maintenance highway" is far from what PREPA envisions, and has never been part of the project.

- The Service is concerned about the possible impacts of directional drilling in the karst portions of the pipeline corridor. Voids in the rock matrix may lead directly to the aquifer, and a "frac-out" of drilling muds in this type of terrain and geology could contaminate underground waters and adversely affect human health, unique subterranean fauna, and commerce.

RESPONSE: It is recognized that due care must to taken to ensure that contractors adhere to prudent practices to avoid the accidental release of bentonite mud. The North American Society for Trenchless Technology (NASTT) provides guidance for the analysis and design of tooling essential in reducing the incidence of hydro fractures (frac-outs) in karst environments. Hydro fracture or "frac outs" result when the fluid pressures built up in the borehole exceed the overburden effect of the surround soil medium. Several drilling factors and procedures will be monitored to preclude the development of hydro fractures. Eight significant factors will be evaluated at each HDD. These include: annular space; backream rate; borehole pressure; depth of cover; reamer type; reamer diameter; soil composition; and soil density.

To ensure the Horizontal Directional Drilling (HDD) operations to be conducted in association with the Via Verde Pipeline will comply with all



regulatory permits and standards, proper pre-construction geotechnical investigations will be conducted on the insitu soil formations along the proposed installation route. Tooling used in HDD installations will be matched to the soil medium to be encountered. The Frac-Out Plan (Draft included in the FEIS approved on November 30, 2010) will be enhanced to stipulate lined pits and all environmental details depicted for the sedimentation ponds.

In summary, the HDD operation to be utilized on the Via Verde pipeline will include proper pre-construction geotechnical investigations, limit drill fluid application rates, utilize an appropriate type reamer to reduce the extent and magnitude of the drilling fluid dispersed, carefully monitor drilling mud pressures increased until the midpoint of the installation is attained, and insure proper containment, recycling, and/or reuse of drilling muds. All HDD operations for the Via Verde Pipeline will be conducted in accordance with the guidelines and recommendations of the North American Society for Trenchless Technology (NASTT) for karst environments. Regardless, PREPA is willing to include any specific recommendations provided by the USCOE to improve the Frac-Out Plan included in the FEIS.

4. Endangered Species

- The Service also continues to recommend surveys of the coqui llanero (*Eleutherodactylus juanariveroi*) where the project crosses wetlands in Toa Baja.

RESPONSE: The applicant has met and/or engaged in teleconferences with the Service on six occasions to date. Surveys for federally listed Threatened and Endangered species, utilizing regional experts approved by the USFWS, have been and continue to be performed by PREPA within the project ROW. These site specific field surveys have been coordinated with the USFWS as to protocols and individual species to be assessed. To date, no threatened and endangered plant species have been identified and the list of faunal species of concern have been narrowed to six species, two of which have been positively documented as occurring within the ROW. Surveys for the six species previously identified remain on-going.

- The Corps needs to make an effect determination with regards to the endangered Antillean manatee (*Trichechus manatus*). The Corps' biological assessment (BA) should include an analysis of any necessary changes to current facilities and/or operation of the EcoElectrica LNG terminal needed for the Via Verde project.



RESPONSE: A response to the USFWS position regarding the EcoElectrica facility was provided above and PREPA sees no valid reason why a BA would include this analysis. Since no construction that has the potential to harm or disturb the manatee is proposed as part of this project, the applicant believes a "no effect" determination by the Corps is appropriate for the endangered Antillean manatee (*Trichechus manatus*). Moreover this concern was to be considered and evaluated at the time EcoElectrica requested a Plant Modification Permit that was granted in 2009 with the endorsement of the Service.

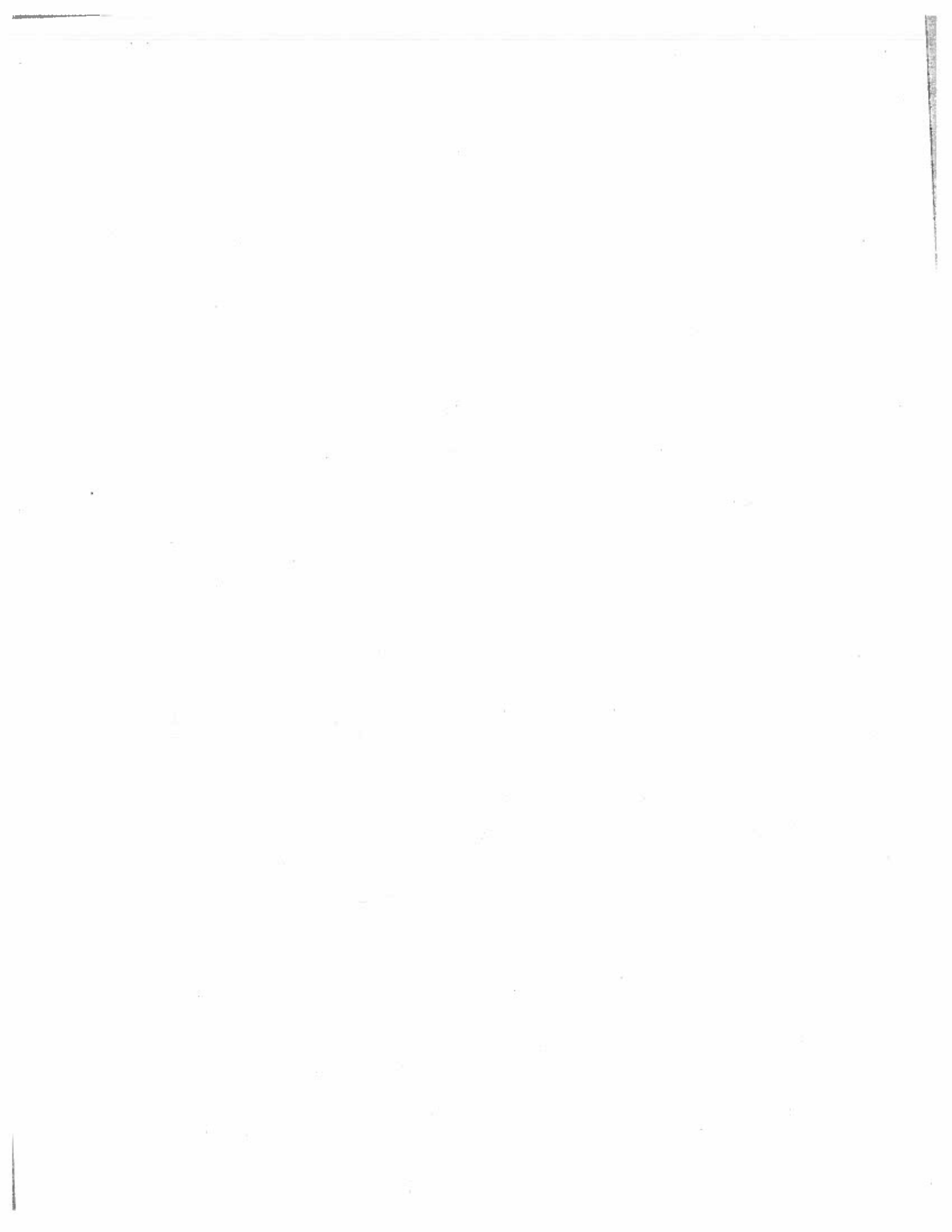
- USFWS recommended the development of a Biological Assessment, since it considered the project a major construction activity under NEPA.

RESPONSE: On October 18, 2010, the Service provided technical assistance to the Corps regarding information included in the draft Biological Evaluation for the project. It was concluded that additional biological evaluations to be provided by the applicant must rely upon survey methodologies that maximized detection probabilities for federally-listed species and must include site-specific habitat characterization. On November 10, December 2, and December 8, 2010, the Service provided additional technical assistance to the project applicant regarding appropriate survey methods for listed species along the proposed route.

The proposed project will result in only temporary impacts to approximately 152 acres of wetlands and no permanent fill or net loss to Waters of the United States (WoUS) will occur. After completing the environmental assessment and developing a plan to address the temporal loss of wetland functions (if required) the applicant believes the project will not result in any substantial effects on the aquatic environment and therefore a Finding of No Significant Impact (FONSI) is appropriate.

At the present time, with full knowledge and approval of the Service, the applicant has a team of regional scientific experts conducting site specific, appropriate surveys along the proposed route to determine presence/absence of listed species within the project area and the amount of suitable habitat. The survey methodologies developed and the surveys being conducted are being carried out by experienced and qualified personnel, and in close coordination with the Service. The draft Biological Assessment (Evaluation) will be appended to include the results of such surveys and will be the basis for all future consultations with the Service.

In addition to the above, the DNER requested that, to further ensure no federally-listed species is affected as a result of this project, a regional Biologist be assigned to each of the segments of Via Verde to be constructed. He, as well as an interdisciplinary group of professionals (Soil experts, Geologist and Hydrologist), will inspect the construction areas to ensure federally-listed species are fully protected.



- USFWS would like to provide technical assistance for the planning and implementation of the surveys to inform the Biological Assessment.

RESPONSE: The applicant wishes to thank the USFWS for the technical assistance provided to date and includes the information (below) as an update to on-going surveys and project research. The applicant recognizes that some of the information included has previously been provided to the Service and/or the USACE.

Habitat characterization for the Puerto Rican sharp-shinned hawk and Puerto Rican broad-winged hawk

- USFWS wanted to meet with the species experts and discuss, during a working meeting, the areas to be included in the analysis to ensure that all available information is considered for the effects determination. USFWS also wanted to have the opportunity to visit the areas with contracted personnel. The agency did not concur with the applicant that it is possible to avoid impacts to breeding habitat and breeding behavior without first identifying the breeding territory. Under the assumption that suitable habitat is occupied for breeding, possible take as defined by the ESA would be anticipated.

RESPONSE: PREPA committed to complete the requested raptor studies using Mr. Derek Hengstenberg, an acknowledged expert acceptable to the USFWS. As requested, Mr. Hengstenberg and the PREPA Team participated in working meetings (December 2010 to date) with the USFWS and agreed to field survey protocols, site locations, survey locations and times. Prior to the December USFWS meeting and teleconference, Mr. Hengstenberg prepared a GIS map with proposed raptor observation locations for review and approval by USFWS. In addition, Mr. Hengstenberg has agreed to share any and all available relevant raptor data with USFWS in dbf/xls file format. Mr. Hengstenberg commenced field surveys the week of January 10, 2011. The surveys were completed on January 27. The results of the surveys will be provided to the USFWS on or about February 11, 2011. Upon receipt of the surveys, the applicant will meet with the USFWS to evaluate the number of breeding territories that could be affected by the project construction (if any).

Potential presence of endangered plants

- USFWS did not agree with the Applicant's proposal of surveying at intervals of 100 m within suitable habitat. It recommends that personnel trained to recognize the listed species systematically search all areas of suitable habitat within the project footprint. It proposed a working meeting

between its staff and the applicant's contracted personnel to share information and delineate together the survey areas.

RESPONSE: The field review protocols to be utilized by Dr. Frank Axelrod and a team of qualified professionals were revised, with prior concurrence of the USFWS, to maximize the likelihood of locating special status plant species or special status natural communities that may be present. The protocols include intensive, systematic surveys targeted to detect the rare plant species in areas that harbor suitable habitat in the regions identified by USFWS. The target species will include those species identified in the USFWS letter to the applicant dated June 30, 2010. The level of effort required per given area and habitat will be dependent upon the vegetation and its overall diversity and structural complexity, which will determine the distance at which plants can be identified. Biologists will walk parallel transects spaced 5 to 10 meters (16 to 33 feet) apart throughout the entire site (in areas where suitable habitat exists) thereby entirely and systematically screening the area. Transects will be stratified by topography or plant community for convenience. All field survey crews will include at least one member who has the ability to identify sterile specimens of listed plant species and who has seen the target species growing in its natural habitat. Other team members may be trained using photographs and/or herbarium specimens but all must be accompanied in the field by the aforementioned experienced crew member during all surveys. Prior to conducting the field surveys, a working meeting will be held between the PREPA team and the USFWS. The purpose of this meeting will be to share information and to clearly identify the limits of those areas to receive intensive, systematic surveys.

Survey reports to be prepared will document the locations that were visited, the date of the visit, and the observability and phenology of the target species at that time, plus the date of the survey, the abundance and distribution of all rare species in the survey area. The current status and abundance of any known populations visited as well as any new populations discovered will also be reported. The surveys performed in accordance with the agreed upon species-specific guidelines to be developed by Dr. Axelrod will suffice to provide reasonable evidence that the specified plant taxa do or do not occur in the project area. Surveys that employ methods or timing other than those agreed upon or recommended herein may be used as evidence of the presence (but not absence) of rare plant species.

Final determination as to whether voucher specimens are to be collected will be the responsibility of Dr. Axelrod. All voucher specimens collected will be shared amongst the PREPA Team and the USFWS.

To date, Dr. Axelrod and his team have not found any federally listed species of concern within the limits of, or adjacent to, the Via Verde



Pipeline right-of-way. Dr. Axelrod's fieldwork is currently being completed and a final copy of the team's findings will be presented to the Service in February, 2011.

Potential presence of coqui llanero in Toa Baja

- USFWS wanted the opportunity to visit the proposed project ROW within other wetland areas in northern Puerto Rico to identify whether habitat suitable for the coqui llanero is present in other areas of the route.

RESPONSE: The locations for the surveys for this species have been coordinated with the Service will be limited to that segment of the project located at the Rio Cocal flood plain in the Toa Baja Municipality at this time. Ms. Vega and Mr. Puente will conduct the field surveys after having conferred with Dr. Rafael Jogular, Dr. Neftali Rios, and the Department of Natural & Environmental Resources of Puerto Rico as to the likelihood that this species exists within other sections of the northern ROW. Based upon the guidance of these leading experts; other areas of the ROW may be examined. A written report will be submitted to the USFWS in February 2011. This report will address all concerns and recommendations on this species. This species is presently listed as Critically Endangered by The Department of Natural & Environmental Resources of Puerto Rico and its critical habitat has been identified, PREPA will comply with all State requirements for this species until such time as its review status under the Endangered Species Act has been finalized (Reference: DEPARTMENT OF THE INTERIOR, Fish and Wildlife Service, 50 CFR Part 17, [FWS-R4-ES-2009-0022; 92210-1117-000-B4], Federal Register: July 8, 2009 (Volume 74, Number 129)). The concerns and recommendations generated in the final report will be incorporated into the project design, construction plans, and final permits issued for the project. We must consider that in this particular regard, the DNER evaluated and approved the assessment presented for this particular specie included in the FEIS approved on November 30, 2010.

Potential presence of the Puerto Rican crested toad

- USFWS agreed with PREPA's approach to search for the Puerto Rican crested toad in both the southern and northern limestone forest areas. It recommended that before surveys are initiated, survey areas are discussed and delineated between its staff and contracted species experts. The agency wanted the opportunity to visit the areas with contracted personnel.

RESPONSE: Specific field evaluations for the Puerto Rican Crested Toad (PRCT) - Sapo Concho de Puerto Rico (*Peltophryne lemur*) have been initiated within the municipalities of Vega Baja (Rio Indio), Manatí (karst area south of town), and Peñuelas dry karst as recommended by the



USFWS. The surveys are being conducted by a team of biologists, led by Ms. Sondra Vega and Mr. Alberto Puente. The survey methodologies and protocols have been discussed and approved by the USFWS. The results of the final study, including all survey data, will be submitted to the USFWS in February 2011. This report will address all concerns and recommendations on this species.

Puerto Rican night jar

- USFWS recommended intensive surveys during the breeding season for the endangered Puerto Rican night jar to determine the amount of suitable habitat and the number of singing males or territories that the project may affect.

RESPONSE: Field surveys for Puerto Rican Nightjar were agreed to by the applicant. In light of this agreement, the applicant presented a detailed protocol and methodology to implement the field work agreed upon. This protocol was commented by the USFWS and applicant is incorporating those recommendations to the final protocol which will be filed in the near future. All field work will be conducted and completed during the month on February 2011. All field surveys will be conducted by a regional expert with prior approval of the USFWS. All field findings will be presented in a report to the USFWS for final review and approval.

The amount of dry forest to be cleared within the limits of the project ROW will be carefully calculated and these areas will be surveyed in their entirety. It is conceivable that no nightjar will be technically harmed by the PREPA Vía Verde pipeline. Existing published and USFWS accepted data available from the WindMar project together with the field data to be collected as part of the study to be carried out by PREPA will be used to develop an impact analysis for this species. It has been previously documented that nightjars at the WindMar site have already demonstrated that they can adapt positively to cleared roads. Unlike WindMar, the proposed PREPA ROW will remain vegetated, have leaf litter present, and should act as a viable foraging area for the nightjar.

Upon completion of the field surveys by the PREPA Team, the project site plan will be evaluated for its potential impact to the existing PR Nightjar territories identified, and facilitate the development of a mitigation plan.

Puerto Rican boa

- The applicant should delineate and quantify the amount of suitable boa habitat within the project area. The applicant should first consider alternatives to avoid these areas and develop conservation measures to minimize possible adverse effects where avoidance is not possible. Once possible effects are appropriately minimized, the Service would work with



the Applicant to develop a search and rescue protocol for relocating individual animals to suitable habitat outside of the project area prior to project construction.

RESPONSE: As requested, the PREPA Team has agreed to quantify the potential habitat for the boa. The project will not result in any habitat loss to the snake; although direct impacts to forested systems may result in changes to community structure. Mr. Alberto Puentes will review the pre- and post-project conditions for potential habitation by the boa. Since the boa is found in all habitats; a weighted number could be generated for individual habitat types (based upon existing species occurrence data). Habitat conversion (i.e. forested to herbaceous ROW) could then be addressed by taking the pre- and post-construction acreage for each habitat type times the habitat utilization value to ascertain net change. Any habitat compensation required could be similarly assessed should non-type for type offsets be proposed. Relocation of the pipeline within the proposed ROW will not result in any significant impact and further re-alignment of the ROW is not a viable option due to the need to avoid major population centers pursuant to the requirements of the USDOT Pipeline and Hazardous Materials Safety Administration (PHMSA) regulations and constraints for co-locating a utility line within existing rights-of-way under the jurisdiction of the Federal Highway Administration (FHA). The standard boa construction and preservation conditions provided with the original JPA submittal will address on-going construction once the permit is issued.

5. Impacts to Landowner Incentive Programs

- The present project goes throughout properties under the Service's Partners for Fish and Wildlife Program (PFWP). USFWS identified that at least three properties under a current Conservation Agreement with the Service that may be adversely affected by the proposed project: Hacienda Pellejas in Adjuntas, Hacienda Esperanza in Manati, and the US Navy Radio Station in Toa Baja. Current efforts at these highly ecologically valued properties include restoration of forest, riparian habitat and restoration of wetland areas. The Service has invested close to \$180,000 of federal funds on these restoration activities, and we recommend modifying the project to avoid these areas. If avoidance is not practicable, the conservation investment in these properties must be compensated with comparable restoration efforts on other similar properties.

RESPONSE: As a result of both public comments and regulatory agency concerns, the pipeline was relocated to avoid impacts within the Hacienda Esperanza in Manati. In regard to Hacienda Pellejas and US Navy Radio



Station in Toa Baja, the selected pipeline route avoids the areas where Conservations Agreements have been developed.

6. Wetland Impacts

- USFWS recommended using a 150-foot construction corridor width to estimate temporary impacts.

RESPONSE: PREPA does not agree that a 150-foot wide width should be used to calculate impacts. Best Management Practices (BMP) for construction techniques for the overall project have been provided. In addition, construction techniques and stabilization techniques for individual water crossing types and upland installations were included together with the JPA documentation. The Service has accepted these techniques for past and recent construction activities. If these are no longer acceptable, the Corps should define which specific elements of the BMP, SWPPP and or Frac-Out Plan are deficient and the applicant will gladly meet with the Corps to develop revised conditions based upon current industry standards.

It has been repeatedly stated within multiple sections of the local Environmental Impact Statements approved back on November 30, 2010 and the Joint Permit Application that all disturbed areas within WoUS will be restored to natural (pre-construction) grades and the areas will be restored using the native topsoil. Native seed mixes will be used as necessary to ensure these areas are properly restored.

- The USFWS stated some of the wetlands the project may affect are within areas designated by the Commonwealth of Puerto Rico as Natural Reserves and Critical Wildlife Areas, including: the Cucharillas Marsh PCA, San Pedro Swamp PCA, Cano Tiburones Natural Reserve, and Hacienda la Esperanza Natural Reserve. These areas lie within the northern karst, an area known for its underground streams, springs and shallow aquifer.

RESPONSE: The USFWS comment and concerns are noted. All work conducted in the northern karst area will use due care with respect to disturbance of underground streams, springs and the shallow aquifer. The trenches required to embed the pipeline are in most cases shallower than the surrounding agricultural ditches and canalized streams in the areas of concern. A large percentage of the wetland areas the project corridor crosses are previously disturbed wetlands used in the past for ranching, cattle grazing and/or farming activities.

- The Service is very concerned with the use of HDD in karst topography, where voids in the substrate are common and often connected to ground- and surface-water systems.

RESPONSE: It is recognized that due care must be taken to ensure that contractors adhere to prudent practices to avoid the accidental release of bentonite mud. The North American Society for Trenchless Technology (NASTT) provides guidance for the analysis and design of tooling essential in reducing the incidence of hydro fractures (frac-outs) in karst environments. Hydro fracture or frac outs result when the fluid pressures built up in the borehole exceed the overburden effect of the surround soil medium. Several drilling factors and procedures will be monitored to preclude the development of hydro fractures. Eight significant factors will be evaluated at each HDD. These include: annular space; backream rate; borehole pressure; depth of cover; reamer type; reamer diameter; soil composition; and soil density.

To ensure that the Horizontal Directional Drilling (HDD) operations to be conducted in association with the Via Verde Pipeline will comply with all regulatory permits and standards, proper pre-construction geotechnical investigations will be conducted on the insitu soil formations along the proposed installation route. Tooling used in HDD installations will then be matched to the soil medium to be encountered. The Frac-Out Plan and will be amended to stipulate lined pits and all environmental details which depict the sedimentation ponds will be revised.

In summary, the HDD operation to be utilized on the Via Verde pipeline will include proper pre-construction geotechnical investigations, limit drill fluid application rates, utilize an appropriate type reamer to reduce the extent and magnitude of the drilling fluid dispersed, carefully monitor drilling mud pressures increased until the midpoint of the installation is attained, and insure proper containment, recycling, and/or reuse of drilling muds. Strict adherence to the North American Society for Trenchless Technology (NASTT) guidelines for HDD operations in karst environments will be maintained.

- The pipeline route crosses multiple low-order streams in mountainous areas. These streams are the headwaters of larger rivers and support a marine-derived native stream fauna composed of several species of freshwater shrimp, crabs and gobies. Excessive erosion and sedimentation during construction or maintenance of the ROW could cause long-term or permanent impacts to these important wildlife areas.

RESPONSE: The agency's concerns are noted. Due to the relatively small sizes of the low-order streams to be crossed, the extent and duration of the temporary impacts to these areas will be minimal. The applicant will utilize all applicable turbidity and erosion control measures to insure water quality parameters are in compliance with permit standards. Erosion and sedimentation during construction within the ROW is not expected to cause long-term or permanent impacts to these important



wildlife areas. If the contractor operates improperly the Corps as well as the EPA and the EQB has the authority to bring an appropriate enforcement action aimed to correct any deficiency or deviation into the approved Sedimentation and Erosion Plan noted.

- It is not clear whether the 50-foot permanent ROW in forested wetlands could be used to access the pipeline in the future. If so, then this should be considered a permanent wetland impact. Because of the muck soils associated with some of these wetland types, additional staging areas will be needed for the drill rig, pipe, etc. There is no mention of how drilling mud will be managed, since there will be a need for sumps and other ground disturbances at the drill site to store drill muds.

RESPONSE: Drilling mud management will be accomplished through lined ponds located in upland areas whenever possible. Access to the pipeline through the ROW for surface based maintenance will not occur since the project has been designed so that all inspections and light maintenance of the pipeline can be conducted using a remote controlled, robotic pipeline inspection gauge (PIG). PIG launchers and receivers will be located outside wetlands and other surface waters. After the construction and installation of each pipeline segment, wetlands and surface waters will be restored to their original pre-construction state and allowed to naturally recruit with native species. No permanent fill, net loss of wetlands, or significant changes to community types will occur as a result of the construction of the pipeline.

Construction considerations - Where wetland or special constraints exist, the drilling contractor has the option to use closed containerized vessels for drill mud storage and segregation. Any required staging areas for tanks etc. will be located in upland areas.

7. Mitigation

- The Applicant proposes a .01-to-1 compensatory mitigation ratio. This would amount to 4 acres of compensatory mitigation for an estimated 369 acres of "temporary" wetland impacts, which is inappropriate and unacceptable to the Service. A much higher ratio is necessary to compensate for the: 1) temporary loss of wetlands functions and values; 2) likely permanent loss of functions and values due to contractor errors; and 3) permanent habitat alteration by species such as cattails that rapidly invade disturbed wetland areas and compete with more beneficial wetland plants.

RESPONSES:

1) As indicated in the JPA information and materials provided, wetland disturbance during construction has been repeatedly evaluated to minimize direct aquatic resource impacts. After construction and site



restoration, native vegetation should reestablish naturally. Many of the proposed temporary wetland impacts within the ROW will occur in agricultural fields or farmlands; which while designated as wetlands are routinely maintained, planted, harvested, and drained. The post construction ROW will have restrictions on the types of activities allowed during the active life of the project thereby improving the wetland quality and functions in these areas. Temporal loss of wetland function during construction will be addressed and will be weighed against the net gains associated with restricted activities and elevated levels of protection afforded within the post construction ROW. Potential aquatic resource impacts at some distance in time, or reasonably certain to occur are difficult to imagine, much less predict. The applicant disagrees with USFWS' general statement that a higher ratio of mitigation is required. Notwithstanding, PREPA has agreed to develop a plan requested by the DNER. This is established in the FEIS, at a 3:1 mitigation ratio, for any permanent impact to be done in wetland areas.

- 2) Losses due to contractor errors will be unacceptable to the applicant and constitute an enforceable violation to the regulatory agencies. As required by law, the applicant will notify all appropriate regulatory agencies with its Notice of Intent to commence construction and will make all contractors working on the project aware of the limitations and constraints contained in all permits issued for the project.
 - 3) The applicant recognizes that cattails can rapidly invade disturbed wetland areas and compete with more beneficial wetland plants. The applicant will be amenable to any reasonable restrictions that the Corps may require regarding maintenance and minimum acceptable standards for percent cover by non-native and/or nuisance wetland species.
- The project area includes the mitigation area for the *Gasoducto del Sur* project, despite our repeated requests during the technical assistance process to avoid this area. This area was selected as a mitigation area to preserve its large amount of undisturbed, quality habitat. The Corps needs to assure compliance with previous permit conditions as part of considering this new permit action.

RESPONSE:

The Via Verde project WIL NOT impact the mitigation area selected for the *Gasoducto del Sur*. At this time PREPA is requesting the DNER to complete the purchase of the identified property, according to the survey completed may house an additional parcel of land that could be utilized as a mitigation site for the Via Verde project as well. PREPA has complied with all actions required on its part by the mitigation plans for the *Gasoducto del Sur*.





**Fw: Conferencia Prensa GASODUCTO frente a Cuerpo de Ingenieros EU **
MAÑANA MIERCOLES**

Brenda Reyes to: Carolina Jordan-Garcia, Lourdes Rodriguez,
Hector Velez, Alex Rivera, Jose Soto

02/01/2011 08:15 AM

FYI

Brenda Reyes Tomassini
Public Affairs
U.S. EPA Region 2

Caribbean Environmental Protection Division

----- Forwarded by Brenda Reyes/R2/USEPA/US on 02/01/2011 07:19 AM -----

From: Orlando Negrón <olnr@MSN.COM>
To: PR-INFO@LISTS.SIERRACLUB.ORG
Date: 02/01/2011 06:27 AM
Subject: Conferencia Prensa GASODUCTO frente a Cuerpo de Ingenieros EU ** MAÑANA MIERCOLES
Sent by: "Puerto Rico Conservation News, Announcements and Events"
<PR-INFO@LISTS.SIERRACLUB.ORG>

A todos nuestros socios y amigos:

Sierra Club, Capítulo de Puerto Rico se une en solidaridad al reclamo de Casa Pueblo y al de todas las organizaciones que han expresado su rechazo al GASODUCTO porque no es viable ni seguro. Tampoco representa el modelo de un sistema energético autónomo y limpio que el País se merece.

El Sierra Club presentará próximamente, en conjunto con otras organizaciones y asociaciones, una Plataforma Energética sobre el modelo de consenso del sistema energético para la próxima década.

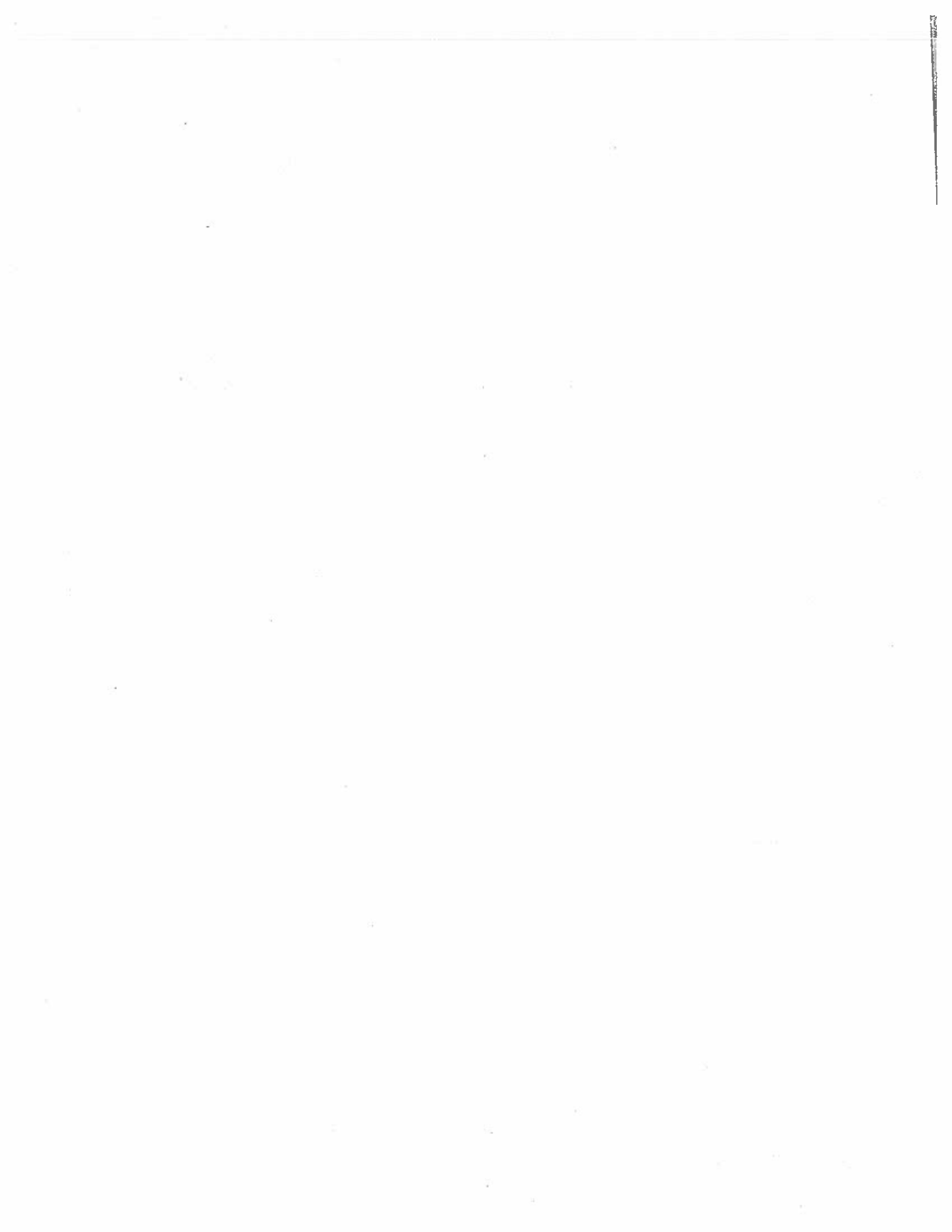
**Orlando L. Negrón
Presidente 2011
Sierra Club
Capítulo de Puerto Rico**

Casa Pueblo Convoca

CONFERENCIA DE PRENSA

Fecha: Miércoles, 2 de febrero – 11:00 AM

Lugar: Frente al Edificio del Cuerpo de Ingenieros EEUU, Puerta de Tierra San Juan (Avenida Fernández Juncos #400)



Conferencia de prensa frente al Cuerpo de Ingenieros. Estarán presentes portavoces de organizaciones comunitarias, científicos, representantes de colegios profesionales, vecinos afectados, oficiales electos, entre otros. Se divulgarán nuevas y contundentes evidencias científicas que demuestran que el proyecto del gasoducto del norte no es seguro ni viable. Los testimonios y nuevas evidencias serán entregadas 'a la mano' a los oficiales del Cuerpo de Ingenieros mientras se exigirá que no se apruebe el permiso del proyecto.

Casa Pueblo de Adjuntas

www.casapueblo.org

tel/fax 787.829.4842

cel. 787.371.1020 / 579.5070

Contactos: Ing. Alexis Massol González / Dr. Arturo Massol Deyá

ESPERAMOS CONTAR CON SU PRESENCIA
comunicado a tus contactos

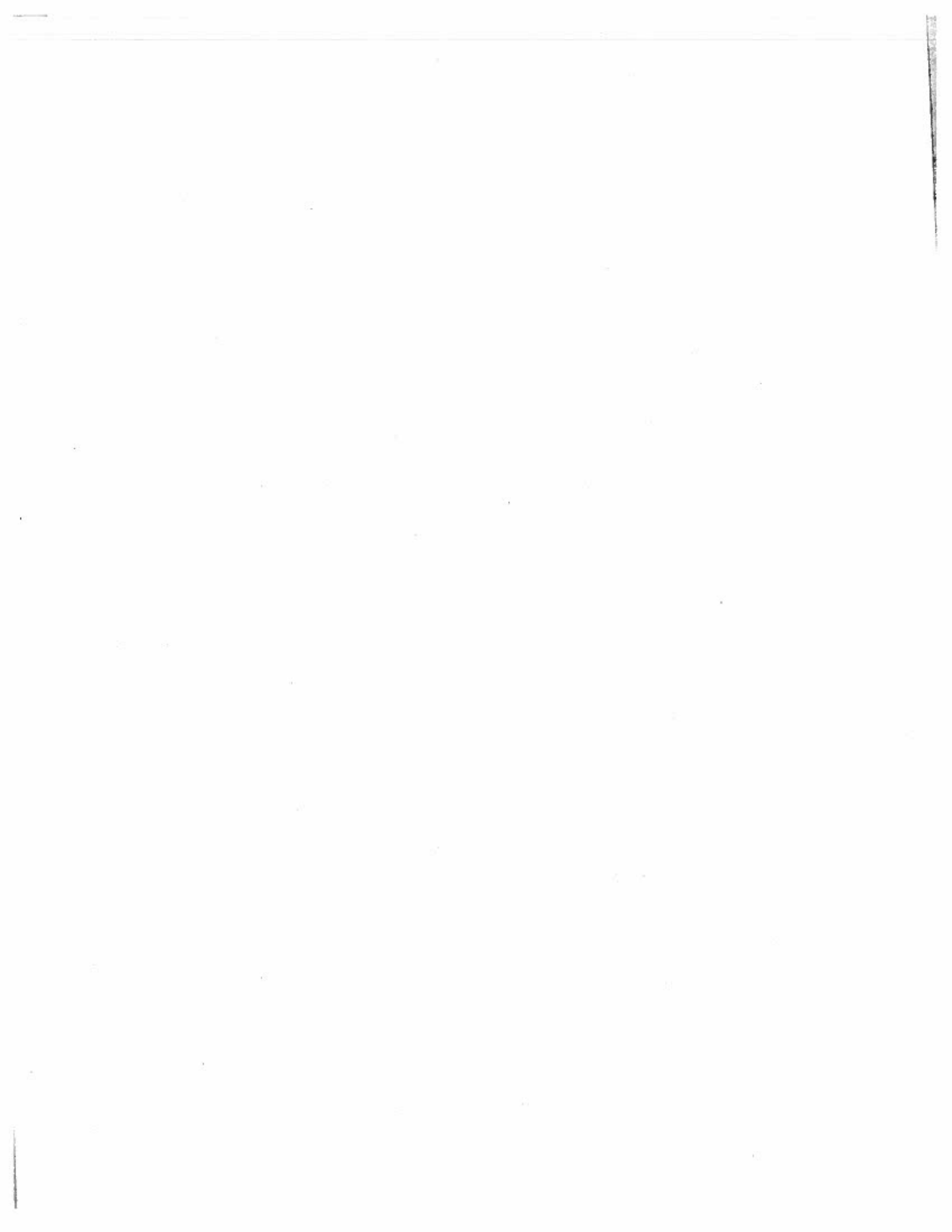
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Via vVrde
Jose Soto
to:
edwin_muniz, marelisa_rivera
02/02/2011 08:39 AM
Show Details

Attached is a letter from Miguel Cordero to our RA.





GOVERNMENT OF PUERTO RICO
Puerto Rico Electric Power Authority

Miguel A. Cordero López, P.E.
Executive Director & CEO

m-cordero@prepa.com

January 27, 2011

Sent Via E-Mail: enck.judith@epa.gov

Ms. Judith Enck
Regional Administrator
U.S. Environmental Protection Agency, Region 2
290 Broadway, 27th Floor
New York, NY 10007-1866

Dear Ms. Enck:

**RE: Puerto Rico Electric Power Authority
Via Verde Natural Gas Project
Public Notice Number SAJ-2010-02881 (IP-EWG)**

Regarding the Environmental Protection Agency's (EPA) December 21, 2010 letter (EPA letter) expressing concerns about the Joint Permit Application (JPA) for the proposed construction of the Via Verde Project (Project), the Puerto Rico Electric Power Authority (PREPA) states that this project is urgently needed to respond to the energy infrastructure crisis that Puerto Rico faces at this time. The project will allow PREPA to generate electricity by burning the much cleaner and cost effective fuel natural gas instead of fuel oils. Electric power produced in Puerto Rico costs 21 cents per kilowatt/hour compared to an average cost in the United States of only 9 cents, a situation that is directly undermining Puerto Rico's economy. The shift from oil to natural gas-based power that would be enabled by the Via Verde project would allow PREPA to reduce criteria pollutants by a significant 64%, which would greatly improve air quality for Puerto Rico. Also, greenhouse gas emissions will be reduced by up to 30%. The Government of Puerto Rico, accordingly, has identified Via Verde, along with the development of renewable generation, as top priority for the island.

The JPA was filed with the United States Army Corps of Engineers, Antilles Office (USACE) on September 20, 2010. USACE issued a public notice (USACE PN) of the JPA on November 19, 2010. Pursuant to Puerto Rico Law 416 (PR Law 416), dated September 22, 2004, which establishes a NEPA-like environmental evaluation process for the Project, PREPA conducted a detailed environmental study of the Project, including the opportunity for public comment and participation at three public hearings, and drafted an environmental impact statement (EIS). This environmental study culminated in the release of a final version of the EIS (Final EIS) on November 29, 2010, which was approved by the Puerto Rico Environmental Quality Board (EQB) as the Final EIS (DIA-F) for the Project. (See Enclosure. Electronic Copy of Final EIS.)



G.P.O. BOX 364267 SAN JUAN, PUERTO RICO 00936-4267 PHONE: (787) 521-4666 FAX: (787) 521-4665

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Ms. Judith Enck
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The EPA letter, filed in response to the USACE PN, makes several points concerning the environmental study of the Project. Prior to addressing them individually, though, we note that the EPA letter appears to be based on an evaluation of only the First Draft of the EIS (*Borrador de Declaración de Impacto Ambiental Preliminar, DIA-P*). In fact, the First Draft of the EIS was revised twice in preparing the Final EIS, with PREPA incorporating changes based on and responding to public comments received at three public hearings, via the public press, and through direct input from relevant federal and state government agencies. PREPA assures that the EPA's concerns have been addressed in the Final EIS, which was published on the webpage of the EQB and PREPA, and that the Project does not require any further environmental studies or analyses. Notwithstanding this, PREPA will address each individual comment included in the EPA letter.

A Final EIS already has been Completed for the Project

The EPA letter states that an environmental impact statement (EIS) rather than an environmental assessment (EA), needs to be prepared for this Project, in order to properly evaluate its environmental impacts. PREPA strongly disagrees with this statement, since it has already conducted a highly detailed and professional NEPA-like environmental study, pursuant to PR Law 416, and prepared a comprehensive EIS for the Project, not an EA. This environmental impact study process has been used in Puerto Rico consistently for the last forty years by all state and federal agencies evaluating projects requiring governmental approval, as codified by federal and state agencies. The evaluation performed by the federal agencies has historically been carried out under the *Federal and Commonwealth Joint Permit Application for Water Resource Alterations in Waters, Including Wetlands, of Puerto Rico (JPA)*.

In conducting the environmental evaluation for both, the EIS, pursuant to PR Law 416, and the JPA, pursuant to Clean Water Act, PREPA carefully evaluated environmental impacts from the Project and determined the nature and level of mitigation efforts required. Recognized professionals were contracted to perform the required scientific studies and surveys. Also, PREPA listened, analyzed and considered all comments received through state and local administrative and judicial processes, and via the public press. The resulting analyses and determinations were incorporated into both, the Final EIS and the Project design and specifications. Also, pursuant to the Clean Water Act, PREPA will address all new comments received through the USACE PN prior to USACE's final evaluation of the JPA.

In particular, the Final EIS includes a Socioeconomic Study (Chapter 7), undertaken pursuant to the EPA Region 2, Interim Environmental Justice Policy and the President's Executive Order Number 12898, that is intended to satisfy the same need as is met by the Environmental Justice Analysis required under NEPA, which is consistent with the position of EPA Region 2 to use a socioeconomic analysis in lieu of the Environmental Justice Analysis for ethnically homogeneous populations like those in Puerto Rico.¹

¹ United States EPA Region 2 Interim Policy on Identifying EJ Areas, December, 2000

Ms. Judith Enck
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We note that USACE determined, in page 5 of the USACE PN, that an EIS under NEPA is not necessary for the Project. We agree. We believe that the Final EIS completed pursuant to PR Law 416 (which addresses the specific concerns expressed in the EPA letter) definitively obviates the need for conducting a new EIS under NEPA, as this largely would duplicate the work already completed and unnecessarily delay the benefits of this important Project.

Alternatives to the Project

The EPA letter states that a more thorough alternatives analysis, including the use of other fuel sources and the construction of an alternative terminal near one of the north coast power plants (with the installation of a shorter length pipeline between Arecibo and Toa Baja), should be considered for the JPA. We understand that 40 CFR 1502.14 provides that an EIS should examine all reasonable alternatives to the Project, with reasonable alternatives including those that are practical or feasible from the technical and economic standpoint and using common sense.² We conducted just this type of evaluation of alternatives, as described in Chapter 4 of the Final EIS, and also included in the JPA.

With regard to our Final EIS Chapter 4 alternatives analysis, we note that PREPA cannot reasonably consider the use of other fuels for electric generation, such as coal or nuclear fuels. The use of coal for PREPA's large generating units was not considered due to the limitations imposed by laws already enacted in Puerto Rico, like PR Law 82 of July 19, 2010, among others, and to EPA's new Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule, of November, 2010, which regulate carbon dioxide (CO₂) and other greenhouse gas emissions. Even using the newest clean technology for burning coal, the amount of CO₂ emissions is around 30% lower when natural gas is burned instead of coal. CO₂ sequestering technology for coal-burning power plants is far from fully developed.

Regarding nuclear fuels, it must be noted that harvesting energy from this type of fuel is expressly excluded by the Puerto Rico Energy Policy established by the Governor's Executive Order OE-1993-57. It must also be noted that the alternatives analysis does consider the use of renewable energy sources to meet PREPA's generating needs, as was requested during the public comment period, and that Puerto Rico's substantial plans to develop renewable generation is discussed in detail in Chapter 4 of the Final EIS, Section 4.4, which was not included in the Preliminary EIS.

Horizontal Drilling in Karst Areas

EPA expresses concerns regarding the use of Horizontal Directional Drilling (HDD) in karst areas, due to past experiences that are not specified. EPA also requests that PREPA establishes mechanisms to monitor drilling operations, so that any escape of drilling mud is detected immediately, as well as to identify steps to be taken to minimize potential impacts of an escape.

² Council on Environmental Quality, http://ceq.hss.doe.gov/nepa/regs/40/1-10_HTM#2, as recovered from the Internet on December 22, 2010.

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January 27, 2011

It must be clarified that the utilization of the HDD technology as described in the *DIA - F* will be mostly geared to cover construction of the Via Verde Pipeline on areas associated with river and highway crossings. Special precautions and care must be taken to ensure that contractors adhere to prudent practices to avoid the accidental release of bentonite mud within the above-mentioned areas.

It is recognized that contractors must take due care and adhere to prudent practices to avoid the accidental release of bentonite mud. The North American Society for Trenchless Technology (NASTT) provides guidance for the analysis and design of tooling essential in reducing the incidence of hydro fractures (frac-outs) in karst environments. Hydro fracture or "frac outs" result when the fluid pressures built up in the borehole exceed the overburden effect of the surround soil medium. Several drilling factors and procedures will be monitored to preclude the development of hydro fractures. Eight significant factors will be evaluated at each HDD. These include: annular space; back ream rate; borehole pressure; depth of cover; reamer type; reamer diameter; soil composition; and soil density.

To ensure that the HDD operations to be conducted in association with the Via Verde pipeline will comply with all regulatory permits and standards, proper preconstruction geotechnical investigations will be conducted on the *in situ* soil formations along the proposed installation route. Tooling used in HDD installations will be matched to the soil medium to be encountered. The Frac-Out Plan (Draft included in the approved FEIS) will be updated to stipulate lined pits and all environmental details depicted for the sedimentation ponds.

In summary, the HDD operation to be utilized on the Via Verde pipeline will include proper preconstruction geotechnical investigations, limit drill fluid application rates, utilize an appropriate type reamer to reduce the extent and magnitude of the drilling fluid dispersed, carefully monitor drilling mud pressures increased until the midpoint of the installation is attained, and insure proper containment, recycling, and/or reuse of drilling muds. All HDD operations for the Via Verde pipeline will be conducted in accordance with the guidelines and recommendations of the NASTT for karst environments. Regardless, PREPA is willing to include any specific recommendations provided by the USCOE aimed to improve the Frac-Out Plan included in the FEIS.

Construction associated with the Via Verde pipeline within the Manatí karst area will be undertaken in accordance with the procedures established in the FEIS Chapter #6 pages 6-18. The construction approach within this area will include the utilization of small construction equipment, as well as pulling the pipeline into the required open trenches. Together with the above PREPA will either avoid entirely the "Mogotes" hills located within said area, or will use the bore technique to go under them. Via Verde pipeline alignment will be adjusted as required to prevent any impact to the karst area hill potential habitat for plants listed in the endangered species list.

The approaches mentioned above address all concerns presented by the Fish and Wildlife Service (FWS), as well as other federal regulatory agencies.

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Compensation and Mitigation Offsets

EPA indicates concerns regarding the adequacy of the compensation to offset any impacts to jurisdictional areas; the need for specific plans to address mitigation in advance; and criteria identified in the USACE PN for "determining whether mitigation sites will be successful." PREPA addressed each of these issues in the Final EIS, where it committed to a mitigation ratio of 3:1 regarding forested and wetland areas. This ratio is greater than the one that would be the minimum accepted by EPA (1:1). These commitments are included on pages 6-2, 6-6, and 6-18 of the Final EIS. This document also considers the compensation to the offset of protected habitats that are part of a Work Plan that was jointly developed and agreed upon by USACE, PREPA and the FWS. PREPA is developing the required mitigation plans and will submit them in the near future for the USACE review and needed action.

Endangered Species Impact

The EPA letter states that a formal Endangered Species Act consultation has been required. However, as of the date of this letter, PREPA has not been notified of any such determination, which we understand falls within the jurisdiction of USACE. Based on the information gathered by field surveyors, including those from FWS, such action is not warranted. Moreover, comments on the Project by the Puerto Rico Department of Natural and Environmental Resources (DNER) indicate that they do not believe that the Project would pose a significant impact to resources covered by the Endangered Species Act (ESA). Thus, to our knowledge, USACE has not modified its original determination to use an informal consultation process under ESA.

In closing, PREPA reemphasizes the seminal importance of the Via Verde Project to Puerto Rico, both environmentally and economically. Once fully implemented, this project will allow PREPA to eliminate over 129 MM pounds of regulated pollutant emissions into the environment, or 64% of our current total and up to 30% of CO₂ emissions. In addition, transitioning away from oil-fired generation will free our people and businesses from being hostage to the international price of oil, which rise has rendered our manufacturing and other business sectors virtually uncompetitive, contributed to the devastating 15% unemployment rate currently being suffered by our workforce, and been punishing our families, half of whom live below the federal poverty line, with energy costs so high that many are unable to afford basic electric service.

PREPA is committed to continue to scrupulously examine the environmental impact of the Project, as shown by our public study process and the release of our Final EIS. PREPA respectfully requests to meet with you and your staff to discuss the concerns expressed in the EPA letter at the soonest possible time, in order that you can be assured of the quality and completeness of our environmental examination.

Cordially,



Enclosure

Fw: Via Verde & Pedro Nieves - DC meeting request.
Teresita Rodriguez to: Jose Soto

02/02/2011 11:49 AM

----- Forwarded by Teresita Rodriguez/R2/USEPA/US on 02/02/2011 11:53 AM -----

From: Judith Enck/R2/USEPA/US
To: Peter Brandt/R2/USEPA/US@EPA, George Pavlou/R2/USEPA/US@EPA, Barbara Finazzo/R2/USEPA/US@EPA, Carl Soderberg/R2/USEPA/US@EPA, Jose Font/R2/USEPA/US@EPA, Teresita Rodriguez/R2/USEPA/US@EPA, Kevin Bricke/R2/USEPA/US@EPA, Grace Musumeci/R2/USEPA/US@EPA, Bonnie Bellow/R2/USEPA/US@EPA, "shore berry" <shore.berry@epa.gov>
Date: 02/01/2011 09:23 PM
Subject: Re: Via Verde & Pedro Nieves - DC meeting request.

Please work on a background memo for nancy or scott or whomever agrees to take the meeting. I would like to review it first. Thanks

Sent by EPA Wireless E-Mail Services
Peter Brandt

----- Original Message -----

From: Peter Brandt
Sent: 02/01/2011 05:02 PM EST
To: Judith Enck; George Pavlou; Barbara Finazzo; Carl Soderberg; Jose Font; Teresita Rodriguez; Kevin Bricke; Grace Musumeci; Bonnie Bellow; shore.berry@epa.gov
Subject: Via Verde & Pedro Nieves - DC meeting request.

Hi,

Pedro Nieves and Daniel Galan of DPNR, through Governor Fortuño's DC office, has requested a meeting with Acting Administrator for Water Nancy Stoner and General Counsel Scott Fulton on Feb. 9. to discuss Puerto Rico's Via Verde project.

Although we all likely know, I've asked OCIR to re-engage the Governor's office on more specifics on what they would like to cover.

Re: Via Verde & Pedro Nieves - DC meeting request. 

Teresita Rodriguez to: Grace Musumeci

02/02/2011 12:08 PM

Cc: Barbara Finazzo, Bonnie Bellow, Kevin Bricke, Peter Brandt, "shore berry",
Lamster.Stephanie, John Filippelli, Jose Soto

Hi Grace,

Jose Soto is preparing the background memo. I'm forwarding your message to him so he can contact Stephanie, if necessary.

Thanks,

Tere

Grace Musumeci Hi Teresita. I imagine you may have the lead on...

02/02/2011 09:19:20 AM

From: Grace Musumeci/R2/USEPA/US
To: Barbara Finazzo/R2/USEPA/US@EPA, Bonnie Bellow/R2/USEPA/US@EPA, Kevin Bricke/R2/USEPA/US@EPA, Peter Brandt/R2/USEPA/US@EPA, "shore berry" <shore.berry@epa.gov>, Teresita Rodriguez/R2/USEPA/US@EPA, Lamster.Stephanie@epa.gov, John Filippelli/R2/USEPA/US@EPA
Date: 02/02/2011 09:19 AM
Subject: Re: Via Verde & Pedro Nieves - DC meeting request.

Hi Teresita.

I imagine you may have the lead on this. If you need anything re NEPA, please contact Stephanie Lamster as I will be on travel the remainder of this week.

Thanks,
Grace

Judith Enck Please work on a background memo for nancy o...
Peter Brandt

02/01/2011 08:23:17 PM

----- Original Message -----

From: Peter Brandt
Sent: 02/01/2011 05:02 PM EST
To: Judith Enck; George Pavlou; Barbara Finazzo; Carl Soderberg; Jose Font; Teresita Rodriguez; Kevin Bricke; Grace Musumeci; Bonnie Bellow; shore.berry@epa.gov
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Although we all likely know, I've asked OCIR to re-engage the Governor's office on more specifics on what they would like to cover.

Via Verde DC meeting - Breifing paper (DRAFT)

Jose Soto

to:

Teresita Rodriguez

02/02/2011 05:39 PM

Cc:

Carl Soderberg, Jose Font

Show Details

Tere,

Attached is my briefing on the Via Verde project, as requested. I'm sending copies of the draft to Carl and Jose Font.

Please distribute as necessary. Thanks!

Fw: Via Verde & Pedro Nieves - DC meeting request.
Teresita Rodriguez to: Jose Soto

02/03/2011 08:22 AM

----- Forwarded by Teresita Rodriguez/R2/USEPA/US on 02/03/2011 08:26 AM -----

From: Judith Enck/R2/USEPA/US
To: Teresita Rodriguez/R2/USEPA/US@EPA
Cc: Peter Brandt/R2/USEPA/US@EPA, Barbara Finazzo/R2/USEPA/US@EPA, Bonnie Bellow/R2/USEPA/US@EPA, Carl Soderberg/R2/USEPA/US@EPA, George Pavlou/R2/USEPA/US@EPA, Grace Musumeci/R2/USEPA/US@EPA, Jose Font/R2/USEPA/US@EPA, Kevin Bricke/R2/USEPA/US@EPA, "shore berry" <shore.berry@epa.gov>
Date: 02/02/2011 06:55 PM
Subject: Re: Via Verde & Pedro Nieves - DC meeting request.

great. short good. long bad.

i will ask a manager from nyc to attend. pedro has never called me about this so not sure what the expectations are around a hq mtg the letter was quite reasonable - correct deficiencies in the eis, not opposition to the pipeline.

Judith Enck
Regional Administrator
U.S. Environmental Protection Agency
290 Broadway
New York, N.Y. 10007-1866
(212) 637-5000

Teresita Rodriguez Jose Soto is writing the first draft. It will be circ... 02/02/2011 04:55:31 PM

From: Teresita Rodriguez/R2/USEPA/US
To: Judith Enck/R2/USEPA/US@EPA
Cc: Peter Brandt/R2/USEPA/US@EPA, Barbara Finazzo/R2/USEPA/US@EPA, Bonnie Bellow/R2/USEPA/US@EPA, Carl Soderberg/R2/USEPA/US@EPA, George Pavlou/R2/USEPA/US@EPA, Grace Musumeci/R2/USEPA/US@EPA, Jose Font/R2/USEPA/US@EPA, Kevin Bricke/R2/USEPA/US@EPA, "shore berry" <shore.berry@epa.gov>
Date: 02/02/2011 04:55 PM
Subject: Re: Via Verde & Pedro Nieves - DC meeting request.

Jose Soto is writing the first draft. It will be circulated by 10:00 am tomorrow (or sooner).

Judith Enck	who is writing the first draft of the briefing memo...	02/02/2011 05:53:24 PM
Peter Brandt	FYI - they are scheduled to meet with Nancy Sto...	02/02/2011 04:36:16 PM
Judith Enck	Please work on a background memo for nancy o...	02/01/2011 08:23:17 PM
Peter Brandt		


----- Original Message -----

From: Peter Brandt
Sent: 02/01/2011 05:02 PM EST
To: Judith Enck; George Pavlou; Barbara Finazzo; Carl Soderberg; Jose Font; Teresita Rodriguez; Kevin Bricke; Grace Musumeci; Bonnie Bellow; shore.berry@epa.gov
Subject: Via Verde & Pedro Nieves - DC meeting request.

Hi,

Pedro Nieves and Daniel Galan of DPNR, through Governor Fortuño's DC office, has requested a meeting with Acting Administrator for Water Nancy Stoner and General Counsel Scott Fulton on Feb. 9. to discuss Puerto Rico's Via Verde project.

Although we all likely know, I've asked OCIR to re-engage the Governor's office on more specifics on what they would like to cover.

Re: Via Verde DC meeting - Breifing paper (DRAFT) 
Teresita Rodriguez to: Jose Soto
Cc: Carl Soderberg, Jose Font

02/03/2011 09:35 AM

Based on the comments received from Judith and Carl, I've considerably shortened Jose's first draft of the Via Verde briefing paper. I believe we should internally maintain Jose's version as it contains more discussion and details of the issues at hand. It would prove very useful should we be called to a conference call to discuss the issues.

Short version attached.



Via Verde Breifing = February 3, 2011.doc

Re: Via Verde & Pedro Nieves - DC meeting request. 

Teresita Rodriguez to: Judith Enck

02/03/2011 10:13 AM

Cc: Peter Brandt, Barbara Finazzo, Bonnie Bellow, Carl Soderberg, George Pavlou,
Grace Musumeci, Jose Font, Kevin Bricke, "shore berry", Jose Soto

Hi Judith,

Attached you'll find the ViaVerde briefing paper for review. We tried to be as concise as possible. We are available at your convenience should there be any questions.



Via Verde Breifing = February 3, 2011.doc

Re: Via Verde & Pedro Nieves - DC meeting request.

Judith Enck to: Teresita Rodriguez

02/03/2011 10:29 AM

Cc: Peter Brandt, Barbara Finazzo, Bonnie Bellow, Carl Soderberg, George Pavlou,
Grace Musumeci, Jose Font, Kevin Bricke, "shore berry", Jose Soto

Looks good. Delete reference to the document not being in spanish. We should not expect permit applicants in pr to provide english copies. Peter, please attach tguis to our original letter and send to hq staff that are doing the mtg today. Peter, please talk to george about whether he or barbara are attending the mtg

Sent by EPA Wireless E-Mail Services
Teresita Rodriguez

----- Original Message -----

From: Teresita Rodriguez

Sent: 02/03/2011 10:13 AM AST

To: Judith Enck

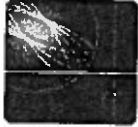
Cc: Peter Brandt; Barbara Finazzo; Bonnie Bellow; Carl Soderberg; George Pavlou; Grace Musumeci; Jose Font; Kevin Bricke; "shore berry" <shore.berry@epa.gov>; Jose Soto

Subject: Re: Via Verde & Pedro Nieves - DC meeting request.

Hi Judith,

Attached you'll find the ViaVerde briefing paper for review. We tried to be as concise as possible. We are available at your convenience should there be any questions.

[attachment "Via Verde Breifing = February 3, 2011.doc" deleted by Judith Enck/R2/USEPA/US]



Martin Peña and Via Verde items for weekly report
Jose Soto to: Carl Soderberg
Cc: Jose Font, Teresita Rodriguez

02/03/2011 04:16 PM

Martin Peña Initiative

- A meeting with Proyecto Enlace, a HUD representative and Brownfields staff is scheduled for January 4, 2011. Potential Brownfields projects, funding opportunities and other related issues will be discussed.
- A briefing on the Martín Peña Initiative for all CEPD staff is scheduled for February 8. This briefing is part of the engagement process for the initiative, as described in the workplan. The purpose of the meeting is to present the proposed workplan, as well as to gather additional ideas and support for related projects.
- The first monthly meeting for key players in the initiative has been scheduled for February 10. A progress report on several on-going activities will be delivered. Discussion of new and pending action items will also occur.

Via Verde

- USACE held a meeting with PREPA, its consultants and the resource agencies (EPA, Fish and Wildlife Service, State Historical Preservation Office, NOAA Fisheries and Federal Highway Administration) on February 1, 2011. During the meeting, agencies' comments were addressed, and additional concerns regarding the project were discussed. As a result of the meeting, PREPA agreed to provide additional documentation regarding the alternatives analysis, specific width of the right-of-way at the various ecosystems to be impacted, details on the drilling method in the Karst region, maintenance requirements, wetlands restoration and mitigation, necessary modifications, if any, at the Ecoelectrica facility where the natural gas will be off-loaded, and a Biological Evaluation concerning the various species identified by the USFWS and NMFS.

Jose Soto
Multimedia Permits and Compliance Branch
Phone: (787) 977-5829



Fw: Via Verde & Pedro Nieves - DC meeting
Daniel Montella to: Christopher Hunter
Cc: Jose Soto, Robert Montgomerie

02/07/2011 11:13 AM

Hi Chris, I got your call about this one. Attached is our letter, a fact sheet, & PN. Our Caribbean Environmental Protection Division in San Juan has the lead on the project, Jose Soto is the contact. It was not a 404(q) letter, but an EIS was recommended.

- Dan



VIA VERDE LETTER.pdf



Via Verde Breifing = February 3, 2011.doc



Via Verde Public Notice.pdf



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF REGIONAL COUNSEL
CENTRO EUROPA BUILDING, SUITE 207
1492 PONCE DE LEON AVENUE, STOP 22
SAN JUAN, PR 00907-4127

December 21, 2010

Mr. José M. Rosado
Deputy District Engineer for the Antilles
U.S. Army Corps of Engineers
Antilles Office
400 Fernandez Juncos Ave.
San Juan, PR 00901-3299

RE: Public Notice Number SAJ-2010-02881 (IP-EWG)

Dear Mr. Rosado:

We are in receipt of the above Public Notice (PN) describing the Puerto Rico Electric Power Authority's (PREPA) request to obtain Department of the Army authorization for construction of a natural gas pipeline project that will pass through the municipalities of Peñuelas, Adjuntas, Utuado, Arecibo, Barceloneta, Manatí, Vega Alta, Vega Baja, Dorado, Toa Baja, Cataño, Bayamón, and Guaynabo, Puerto Rico. The pipeline, known as Vía Verde, would be approximately 92 miles long and 24 inches in diameter with a right-of-way 150 feet wide. The total project area is approximately 1,672 acres and the pipeline would traverse 235 rivers and wetlands, resulting in an estimated impact to 369 acres of jurisdictional waters of the United States. The applicant's stated purpose for this project is to deliver an alternate fuel source to three existing electric power generating facilities located in Peñuelas, Arecibo, and Toa Baja.

After evaluating the information contained in the November 19, 2010 PN, the Environmental Protection Agency (EPA) believes that the applicant has not adequately demonstrated the need for the proposed pipeline in accordance with the Clean Water Act Section 404(b)(1) Guidelines requirements. The applicant must better document the need for a natural gas pipeline by presenting a more thorough alternatives analysis. Such analysis should evaluate other fuel sources other than natural gas since the stated purpose does not specify fuel type, the construction of an alternative terminal near one of the north coast power plants and the installation of a shorter length pipeline between Arecibo and Toa Baja.

EPA also has concerns regarding the use of directional drilling, particularly in karst terrain areas. In the past and on other projects in the Caribbean, directional drilling has resulted in major impacts when the drilling mud leaked into the surrounding environment. Due to the nature of karst terrain, we are concerned that any spill of drilling mud may contaminate groundwater or reach other aquatic resources which were not evaluated as part of this review.

If PREPA complies with the needs requirement of the Clean Water Act Section 404 (b)(1) guidelines, the risks of directional drilling must be thoroughly analyzed. In conjunction with such analysis, PREPA must establish appropriate mechanisms to monitor

the drilling operations so that any escape of drilling mud is detected immediately as well as identify steps to be taken to minimize potential impacts of an escape.

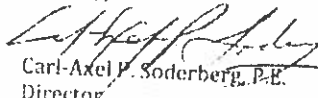
Furthermore, PREPA has not proposed adequate compensation to offset any impacts to jurisdictional areas which would result from the proposed project. While PREPA has proposed the use of horizontal directional drilling and vertical wall trenching, among other measures, to avoid and minimize impacts to wetlands, additional analysis to identify the nature and extent of both temporary and potentially permanent impacts at each jurisdictional area will be needed. We acknowledge that PREPA has offered to be vigilant of such impacts in order to immediately determine whether mitigation is required at any area along the project corridor; but, specific plans to address the need for mitigation must be identified in advance. EPA is also concerned about the criteria identified in the PN for determining whether mitigation sites will be successful. Finally with regard to mitigation, EPA believes that any compensatory mitigation required for permanent impacts should be at a minimum of a 1:1 ratio.

After carefully considering the challenges associated with this project, EPA recommends that an environmental impact statement (EIS) rather than an environmental assessment (EA) be prepared for this project. As highlighted in the PN, the project covers a large area and impacts many rivers and wetlands. Though the wetlands to be traversed are diverse in nature, all provide the important functions of flood water storage and filtration of contaminants that would otherwise reach other aquatic resources. These indirect impacts associated with the loss of wetlands also need to be evaluated. The PN states that the impacts of the project are expected to be temporary in nature; however, the impacts to threatened and endangered species could be extensive, as demonstrated by the fact that a formal versus informal Endangered Species Act (ESA) consultation is being undertaken for the project.

In summary, EPA believes that the Via Verde project could have substantial impacts to aquatic resources and that adequate compensatory mitigation has not been offered to offset such impacts. Furthermore, an EIS is needed to properly evaluate the project's impacts. Therefore, it is EPA's position that a permit for this project be held in abeyance until our concerns are addressed.

If you have any questions regarding this matter, please contact me at (787) 977-5801 or have your staff contact José Soto of the Multimedia Permits and Compliance Branch at (787) 977-5829.

Sincerely,

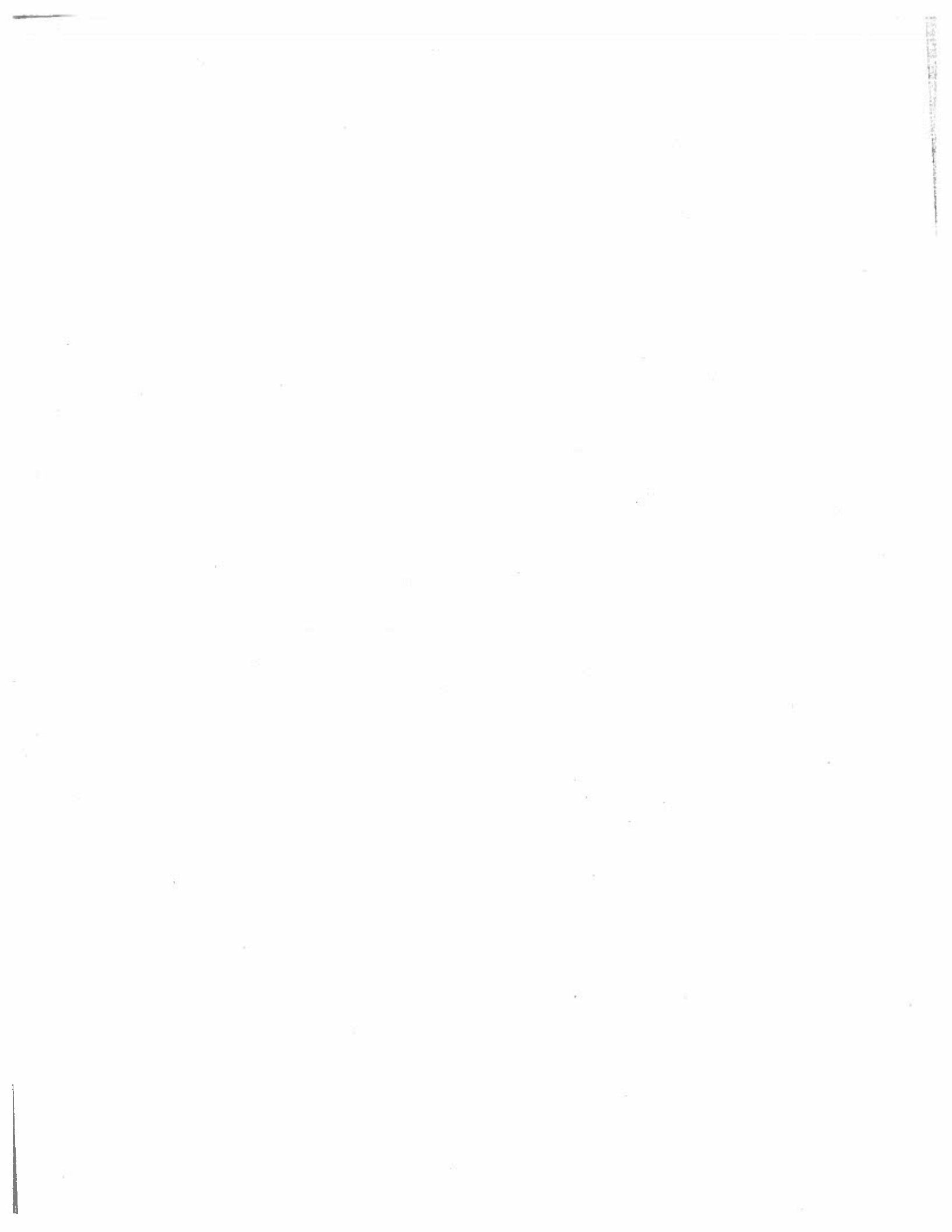


Carl-Axel V. Soderberg, P.E.

Director

Caribbean Environmental Protection Division

cc: USFWS - Boquerón, PR
DNER - San Juan, PR
PRPB - San Juan, PR
PRFQB-San Juan, PR





DEPARTMENT OF DEFENSE
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
ATILLES OFFICE
400 FERNANDEZ JUNCOS AVENUE
SAN JUAN, PUERTO RICO 00901-3299

Antilles Regulatory Section

November 19, 2010

PUBLIC NOTICE

Permit Application No. SAJ- 2010-02881 (IP-EWG)

TO WHOM IT MAY CONCERN: This district has received an application for a Department of the Army permit pursuant to Section 404 of the Clean Water Act (33 U.S.C. §1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. §403) as described below:

APPLICANT: Eng. Francisco E. Lopez
Autoridad de Energía Eléctrica
P.O. Box 364267
San Juan 00936-4267

WATERWAY & LOCATION: The Vía Verde natural gas pipe line project will pass through the municipalities of Peñuelas, Adjuntas, Utuado, Arecibo, Barceloneta, Manati, Vega Alta, Vega Baja, Dorado, Toa Baja, Cataño, Bayamón, and Guaynabo, Puerto Rico.

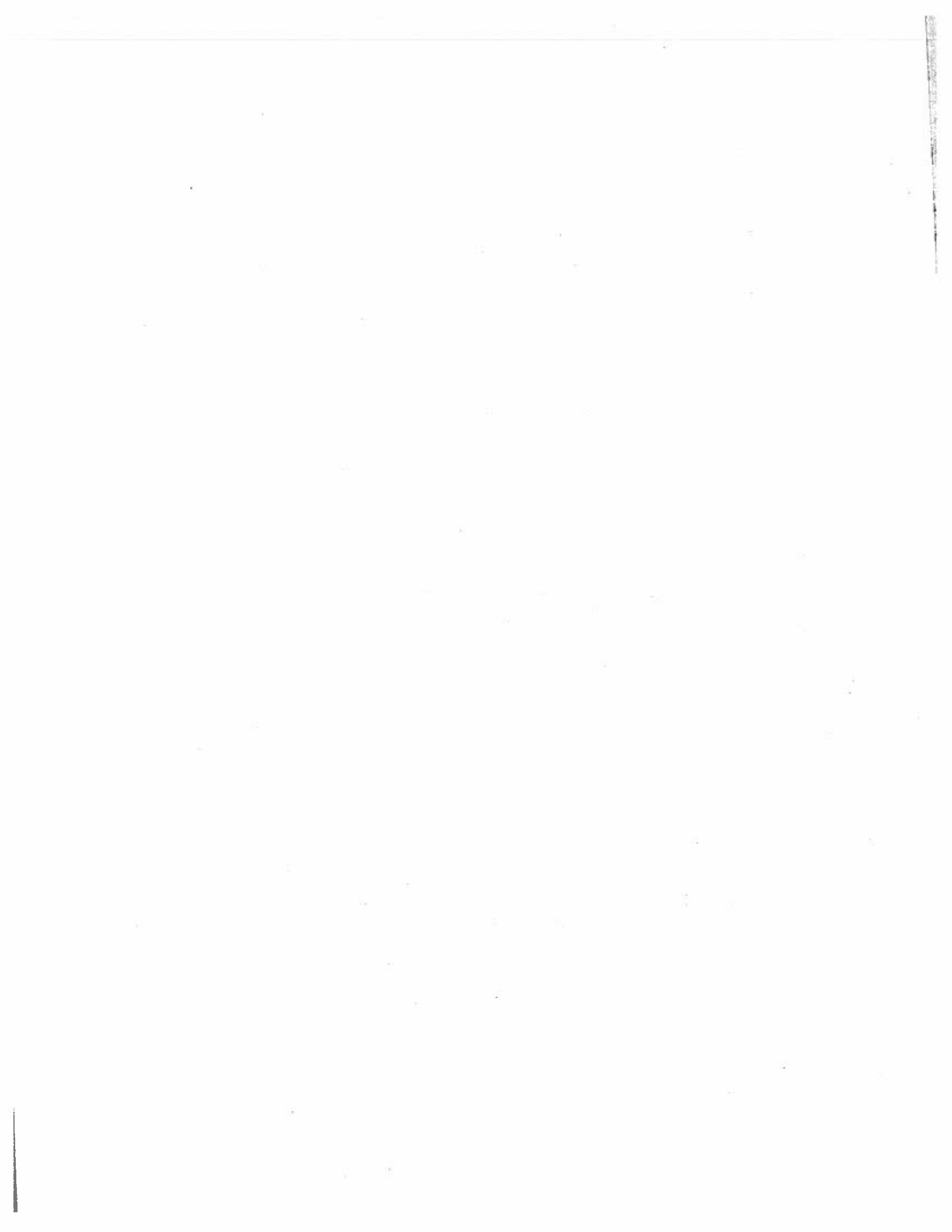
LATITUDE & LONGITUDE: Latitude 18°27'24.17" North, Longitude 66°40'15.93" West

PROJECT PURPOSE:

Basic: Natural gas utility line

Overall: Deliver an alternate fuel source to three existing electric power generating facilities located in Peñuelas, Arecibo, and Toa Baja operated by the Puerto Rico Energy and Power Authority (PREPA).

PROPOSED WORK: The applicant proposes to construct and install a 24-inch diameter steel natural gas (NG) pipeline approximately 92 miles long with a construction right-of-way (ROW) of 150 feet wide, that traverses the island of Puerto Rico from the EcoEléctrica Liquid Natural Gas Terminal in the municipality of Peñuelas, to the Cambalache Thermoelectric Power Plant in the municipality of Arecibo, then east to the Palo Seco power plant facility in the municipalities of Toa Baja and San Juan. The total project area is about 1,672 acres and the pipeline will traverse 235 rivers and wetlands, covering 369 acres of jurisdictional Waters of the United States.



Avoidance and Minimization Information: The applicant has provided the following statement:

The applicant evaluated alternative methods to provide natural gas to the power stations. These options included building a terminal to receive liquid natural gas directly from tanker ships at, or near, the power plants; building storage and re-gasification facilities on the north coast with pipelines to the power plants; and evaluating several different overland routes for a pipeline to deliver natural gas from the existing facility near Peñuelas to the power plants. Public interest and environmental factors were used to identify positive and negative actions with all of these alternatives. The applicant submits the proposed pipeline and the proposed route appear to be the most practical alternative with the least adverse impact to the environment and public safety/interest when considering all factors.

Compensatory Mitigation: The applicant has provided the following statement:

The applicant will incur the costs of horizontal directional drilling (HDD) under all medium to large water bodies, i.e. any rivers and embayments, to avoid a discharge of dredged or fill material into waters of the U.S. Furthermore, the applicant has designed the construction of the pipeline to incorporate the use of vertical wall trenching whenever possible during placement of the pipe, to minimize the width of excavation and impacts in wetlands. If vertical trenching construction method is not practicable, standard ditch excavation with sloped walls will be utilized. Regardless of the method used, the project has been designed to avoid permanent impact and all wetland impacts will be temporary in nature. All excess fill or dredged material will be removed and preconstruction wetland elevations will be reestablished. Wetland organic topsoil will be separated during trench excavation and stockpiled in a separate area. This material will be re-used so that the top 6- inches of wetlands restored after the pipe is placed will be 100% organic material. All stream embankments where trenching occurs will be restored and covered with matting to prevent erosion until local wetland plant communities are reestablished. Clearing activities in waters of the U.S. will not incorporate mechanized equipment and mats will be used wherever possible to avoid the need for temporary fill. In situations where temporary roads are needed to construct HDD work pads in wetland areas, these roads and the work pads will be immediately removed after the HDD operation is completed at each crossing. Wetland conditions will be immediately reestablished at each crossing as the project moves forward. If it is determined that some type of additional compensatory mitigation is required to offset the minimal temporal impacts that will occur as the pipeline is constructed, the applicant is prepared to identify upland areas along the edges of existing wetland sites that will be crossed where the uplands can be lowered in elevation (scraped down) and additional herbaceous wetland habitat can be established on an agreed upon acreage ratio. Given the temporary nature of impacts expected to occur from construction, the applicant expects any such mitigation required by the U.S. Army Corps of Engineers



(Corps) to be at or below 0.01 acres of compensatory mitigation per 1 acre of temporary wetland impacts.

EXISTING CONDITIONS: The pipeline route will encompass both private and public lands which include commercial, industrial, and agricultural land. In its route, the pipeline will pass along populated urban areas, roads, and highways. Within the north (San Juan to Arecibo) segment of the Project route, the majority of the areas are herbaceous wetlands, rivers, creeks and channel crossings. North to south segment of the project (Arecibo to Peñuelas) includes mostly rivers, creeks and channel crossings. The wetland systems consist of Palustrine Herbaceous Wetlands dominated by herbaceous species, Estuarine Forested Wetland mainly dominated by mangrove trees, Estuarine Forested Canal mostly black mangroves (*Avicennia germinans*), and Estuarine Salt Flat dominated by dwarf black mangrove trees.

ENDANGERED SPECIES: The Corps has determined the proposal may affect 32 listed species, including the endangered Puerto Rican *Nightjar* (*Caprimulgus noctitherus*); the endangered Puerto Rican parrot (*Amazona vittata*), the threatened Puerto Rican crested toad (*Peltophryne lemur*), Puerto Rican boa (*Epicrates inornatus*), Puerto Rican sharp-shinned hawk (*Accipiter striatus venator*), Puerto Rican broad-winged hawk (*Buteo platypterus brunnescens*), and Puerto Rican plain pigeon (*Patagioenas inornata wetmorei*); and the listed plant species *Auerodendron pauciflorum*, palo de Ramon (*Banara vanderbiltii*), diablito de tres cuernos (*Buxus vahli*), *Cordia bellonis*, *Daphnopsis helleriana*, palo de rosa (*Ottoschulzia rhodoxylon*), *Myrcia pagani*, chupacallos (*Pleodendron macranthum*), *Schoepfia arenaria*, erubia (*Solanum drymophilum*), *Tectaria estremerana*, *Thelypteris verecunda*, *Thelypteris yaucoensis*, *Thelypteris inabonensis*, *Chamaecrista glandulosa*, Cobana negra (*Stahlia monosperma*), *Polystichum calderoense*, nogal (*Juglans jamaicensis*), *mitracarpus polycladus*, *mitracarpus maxwelliae*, *Cordia rupicola*, *Catesbaea melanocarpa*, *Eugenia woodburyana*, Bariaco (*Trichilia triacantha*), and St. Thomas prickly ash (*Zanthoxylum thomasianum*) or its designated critical habitat. The Corps will request initiation of formal consultation with the Fish and Wildlife Service/National Marine Fisheries Service pursuant to Section 7 of the Endangered Species Act.

ESSENTIAL FISH HABITAT (EFH): This notice initiates consultation with the National Marine Fisheries Service on EFH as required by the Magnuson-Stevens Fishery Conservation and Management Act of 1996. The proposal would impact approximately 28.5 acres of Estuarine Forested Wetland and Canals utilized by various life stages of Jewfish (*Epinephelus itajara*), Nassau Grouper (*E. striatus*), Red Hind (*E. guttatus*), Yellowtail Snapper (*Ocyurus chrysurus*), Mutton Snapper (*Lutjanus analis*), *Chaetodon striatus*, *C. capistratus*, *C. ocellatus*, *C. aculeatus*, Spiny Lobster, Queen Conch, and Corals. Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or Federally managed fisheries in the Tallaboa Bay, Arecibo Bay, and Ensenada de Boca Vieja Bay. Our final determination relative to project impacts and



the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

CULTURAL RESOURCES: Information provided by the proponent shows cultural or historic resources along the proposed construction right of way of the project. Pursuant to 33 CFR 325, Appendix C, 3.a and 7.b and in accordance with 36 CFR 800.4(a), the Corps hereby requests information to determine potential effects.

NOTE:

- (1) This public notice is being issued based on information furnished by the applicant. This information has not been verified or evaluated to ensure compliance with laws and regulations governing the regulatory program.
- (2) The jurisdictional line has not been verified by Corps personnel.
- (3) The proponent submitted the permit application for approval under the Nationwide Permit Program. However the Corps exerted discretionary authority to allow review as a standard permit and solicit public input.
- (4) More detail plans and drawings are available for viewing at the following web site:

<http://www.sai.usace.army.mil/Divisions/Regulatory/interest.htm>

In addition this same information is available for viewing at our office located at the address on this letterhead.

AUTHORIZATION FROM OTHER AGENCIES: Water Quality Certification will be required from the Puerto Rico Environmental Quality Board and a Certificate of Consistency with the Puerto Rico Coastal Zone Management from the Puerto Rico Planning Board will be required.

Comments regarding the application should be submitted in writing to the District Engineer at the above address within 30 days from the date of this notice.

If you have any questions concerning this application, you may contact Edgar W. Garcia at the letterhead address, by electronic mail at edgar.w.garcia@usace.army.mil, by fax at 787-729-6905, or by telephone at 787-729-6905.

The decision whether to issue or deny this permit application will be based on the information received from this public notice and the evaluation of the probable impact to the associated wetlands. This is based on an analysis of the applicant's avoidance and minimization efforts for the project, as well as the compensatory mitigation proposed.



IMPACT ON NATURAL RESOURCES: Preliminary review of this application indicates that an Environmental Impact Statement will not be required. Coordination with U.S. Fish and Wildlife Service, Environmental Protection Agency (EPA), the National Marine Fisheries Services, and other Federal, State, and local agencies, environmental groups, and concerned citizens generally yields pertinent environmental information that is instrumental in determining the impact the proposed action will have on the natural resources of the area. By means of this notice, we are soliciting comments on the potential effects of the project on threatened or endangered species or their habitat

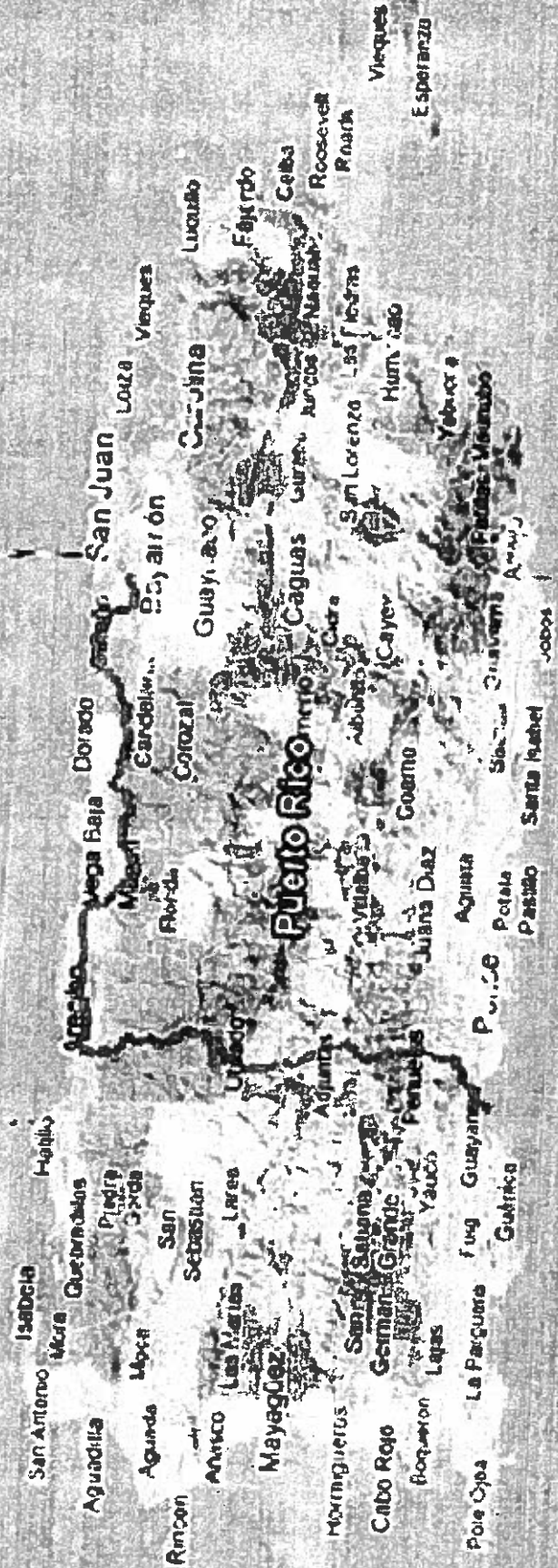
EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including cumulative Impacts thereof; among these are conservation, economics, esthetics, general environmental concerns, wetlands, historical properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food, and fiber production, mineral needs, considerations of property ownership, and in general, the needs and welfare of the people. Evaluation of the impact of the activity on the public interest will also include application of the guidelines promulgated by the Administrator, EPA, under authority of Section 404(b) of the Clean Water Act of the criteria established under authority of Section 102(a) of the Marine Protection Research and Sanctuaries Act of 1972. A permit will be granted unless its issuance is found to be contrary to the public interest. The US Army Corps of Engineers (Corps) is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other Interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess Impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

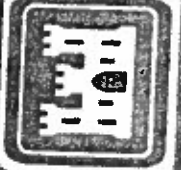
COASTAL ZONE MANAGEMENT CONSISTENCY: In Florida, the State approval constitutes compliance with the approved Coastal Zone Management Plan. In Puerto Rico, a Coastal Zone Management Consistency Concurrence is required from the Puerto Rico Planning Board. In the Virgin Islands, the Department of Planning and Natural Resources permit constitutes compliance with the Coastal Zone Management Plan.

REQUEST FOR PUBLIC HEARING: Any person may request a public hearing. The request must be submitted in writing to the District Engineer within the designated comment period of the notice and must state the specific reasons for requesting the public hearing.

D. W. Kuisel





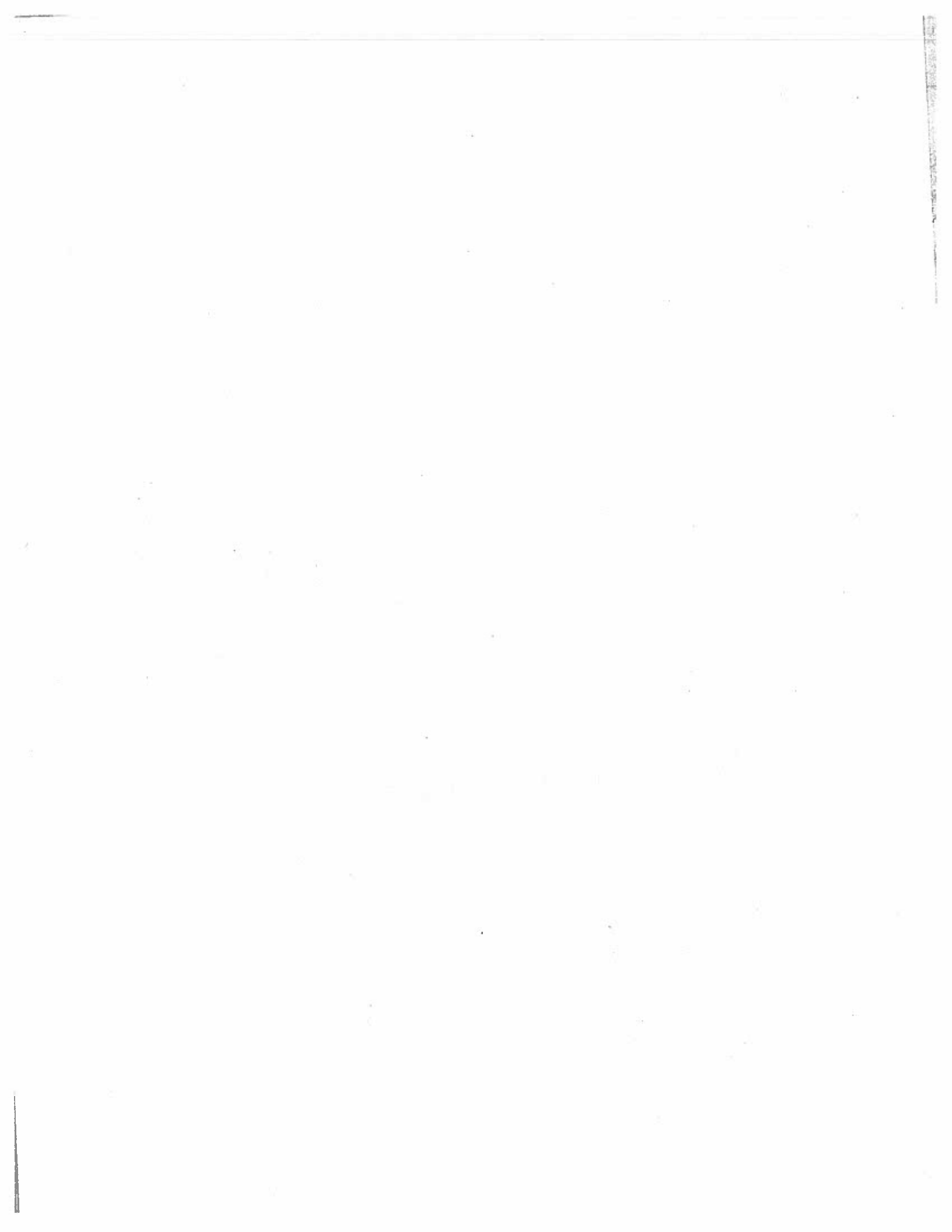


 US ARMY CORPS OF ENGINEERS
 PERMIT APPLICATION SAJ-2010-02881
 DRAWINGS NOV 2010, PAGE 1 OF 16

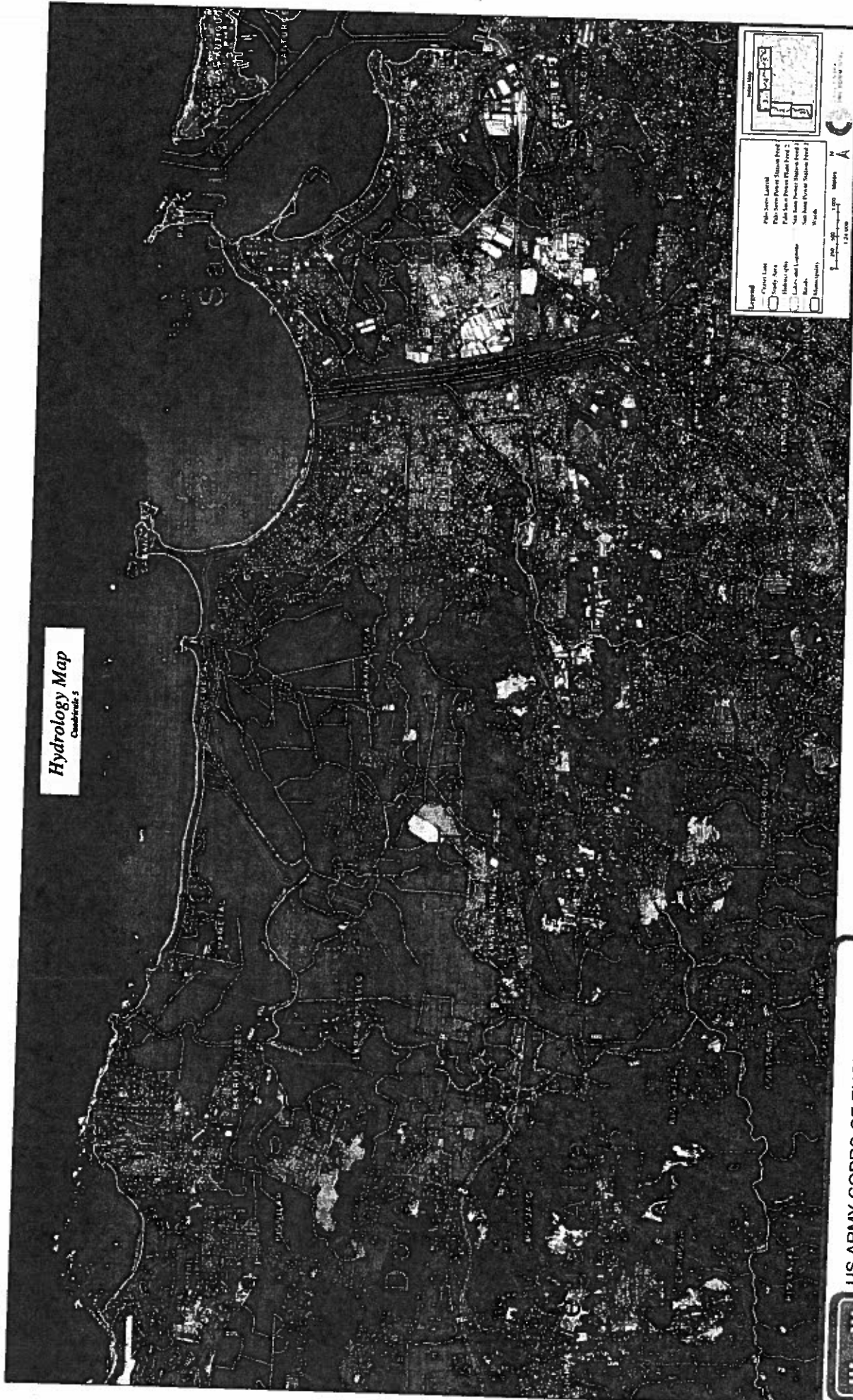
© 2010 Europa Technologies
 Image U.S. Geological Survey



 Via Verde NGPL





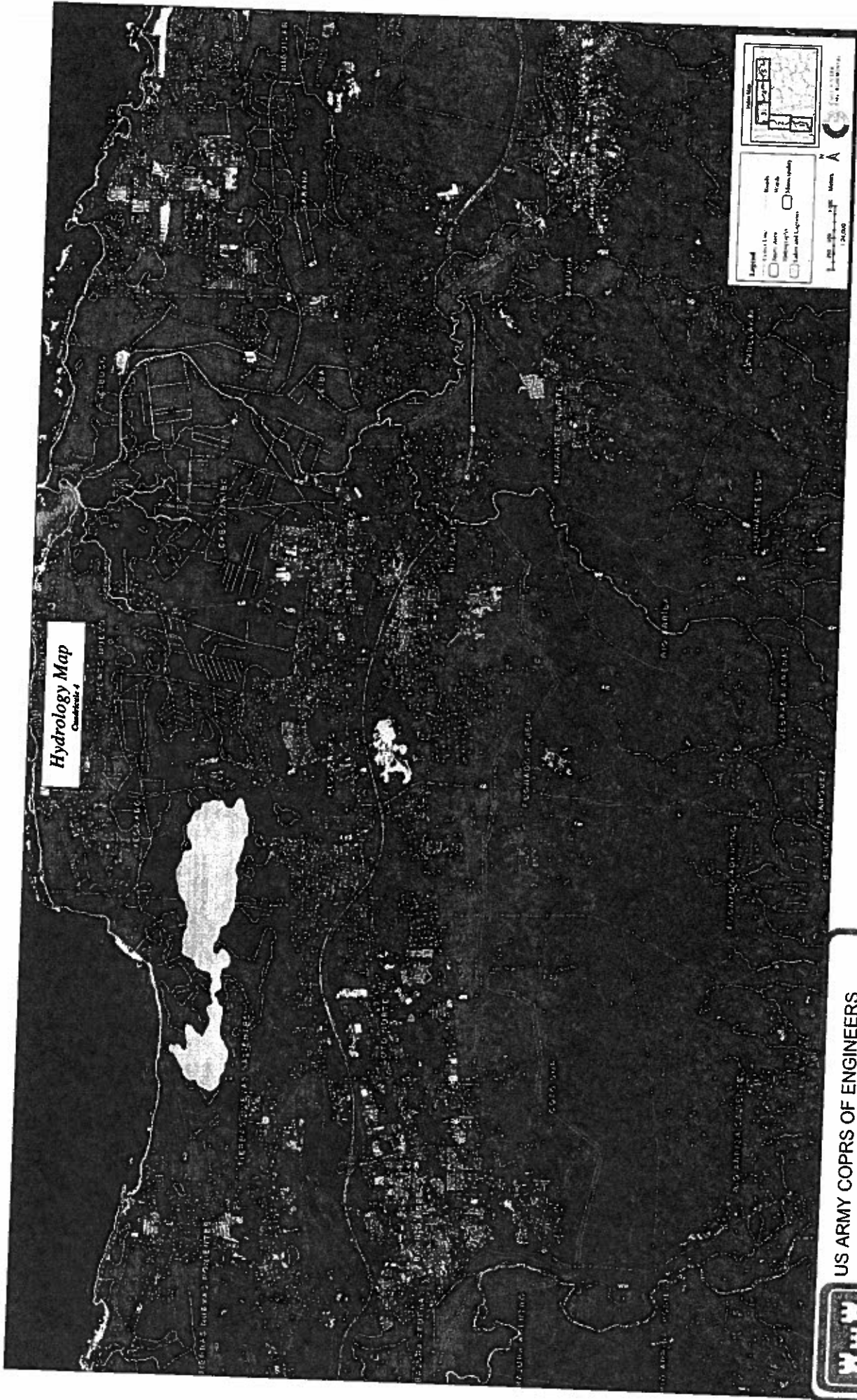
Hydrology Map
 Quadrant 5




 US ARMY CORPS OF ENGINEERS
 PERMIT APPLICATION SAJ-2010-02881
 DRAWINGS NOV 2010, PAGE 3 OF 16



Hydrology Map
Candidate 4



Legend

- Water Body
- Road
- Other
- Water Body
- Water Body

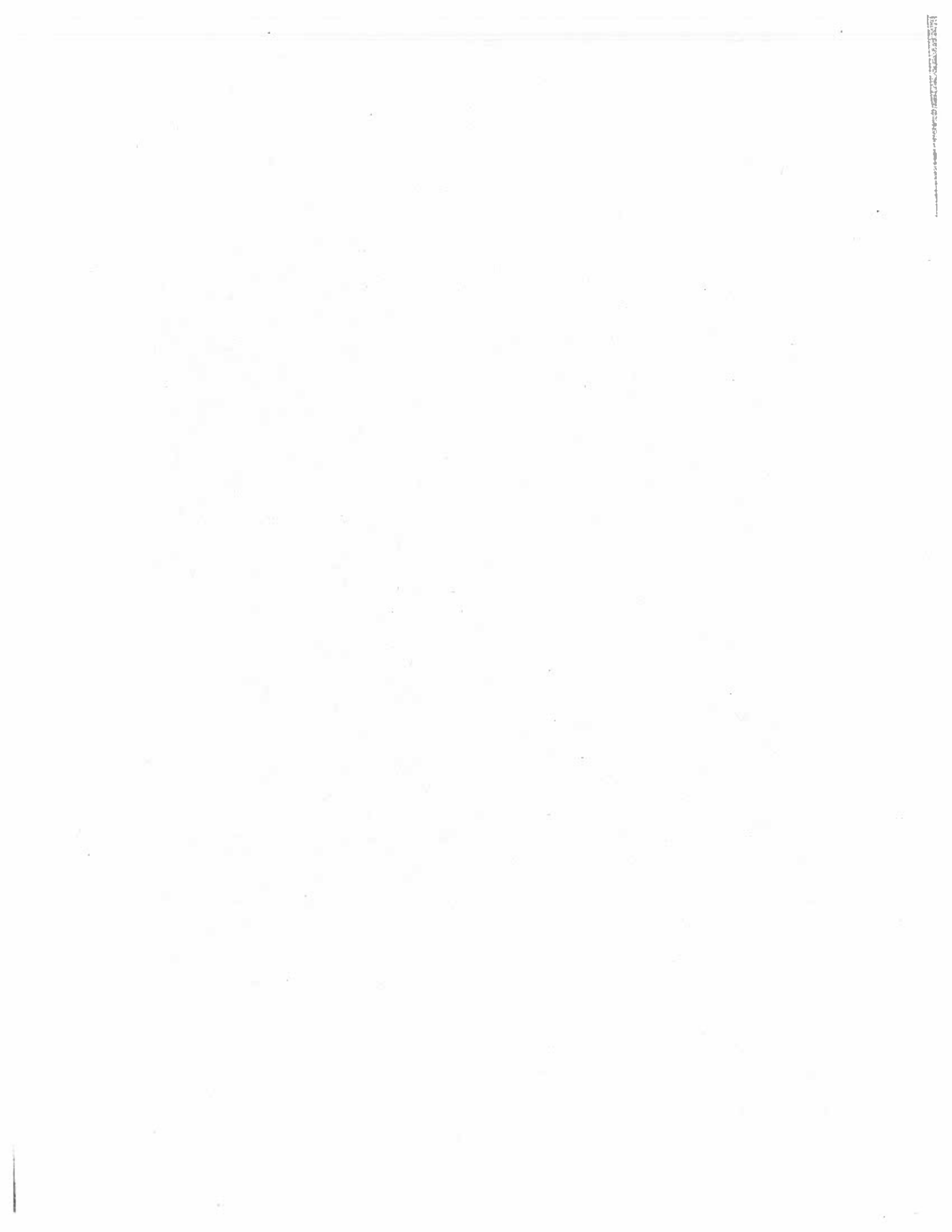
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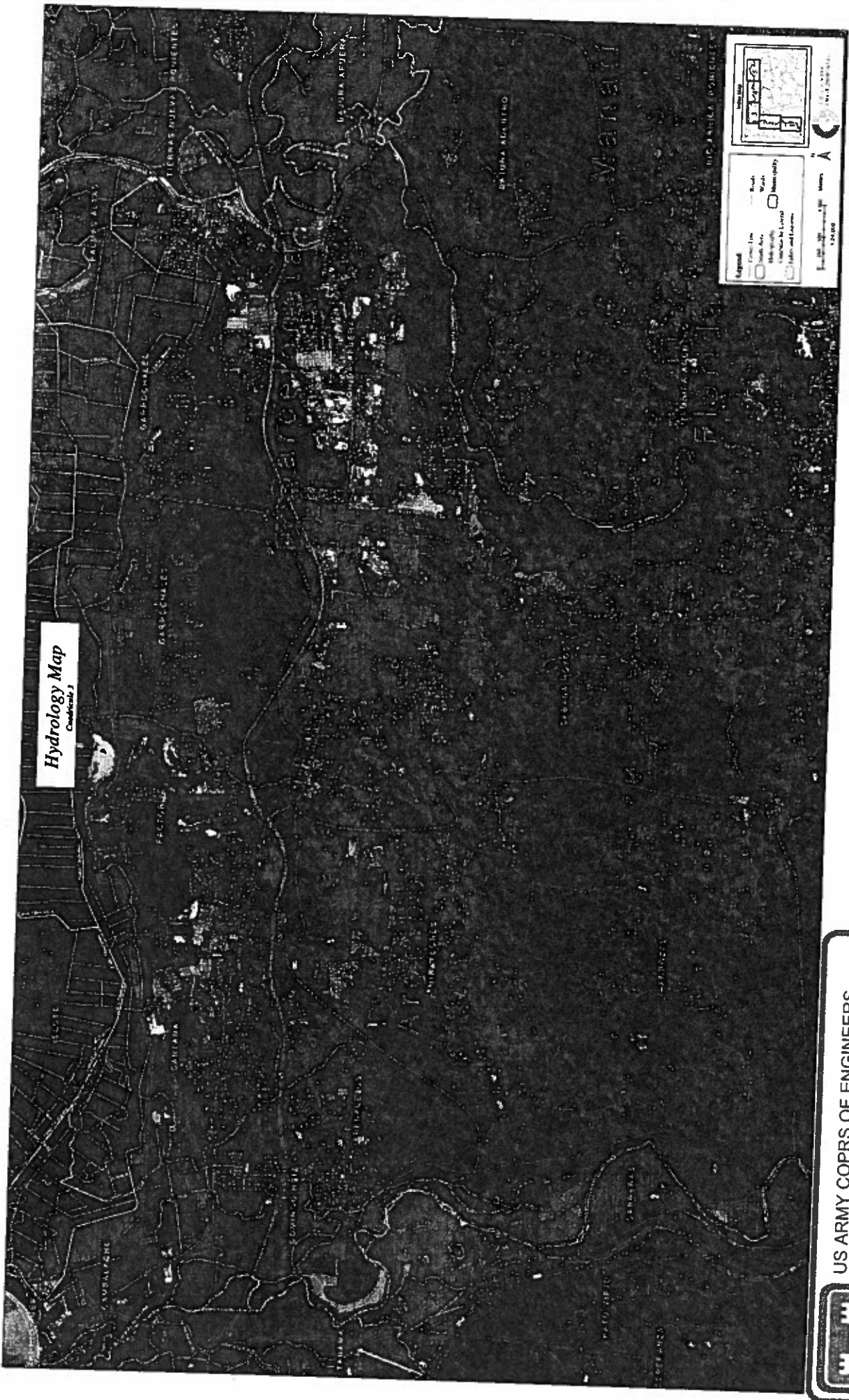
North Arrow

Inset Map

US ARMY CORPS OF ENGINEERS
PERMIT APPLICATION SAJ-2010-02881
DRAWINGS NOV 2010, PAGE 4 OF 16







Hydrology Map
Condiments 3

Legend

- Contour Line
- Check Area
- Hydrology
- Contour by Level
- Urban and Forests

Scale: 1:25,000

North Arrow

Map Scale

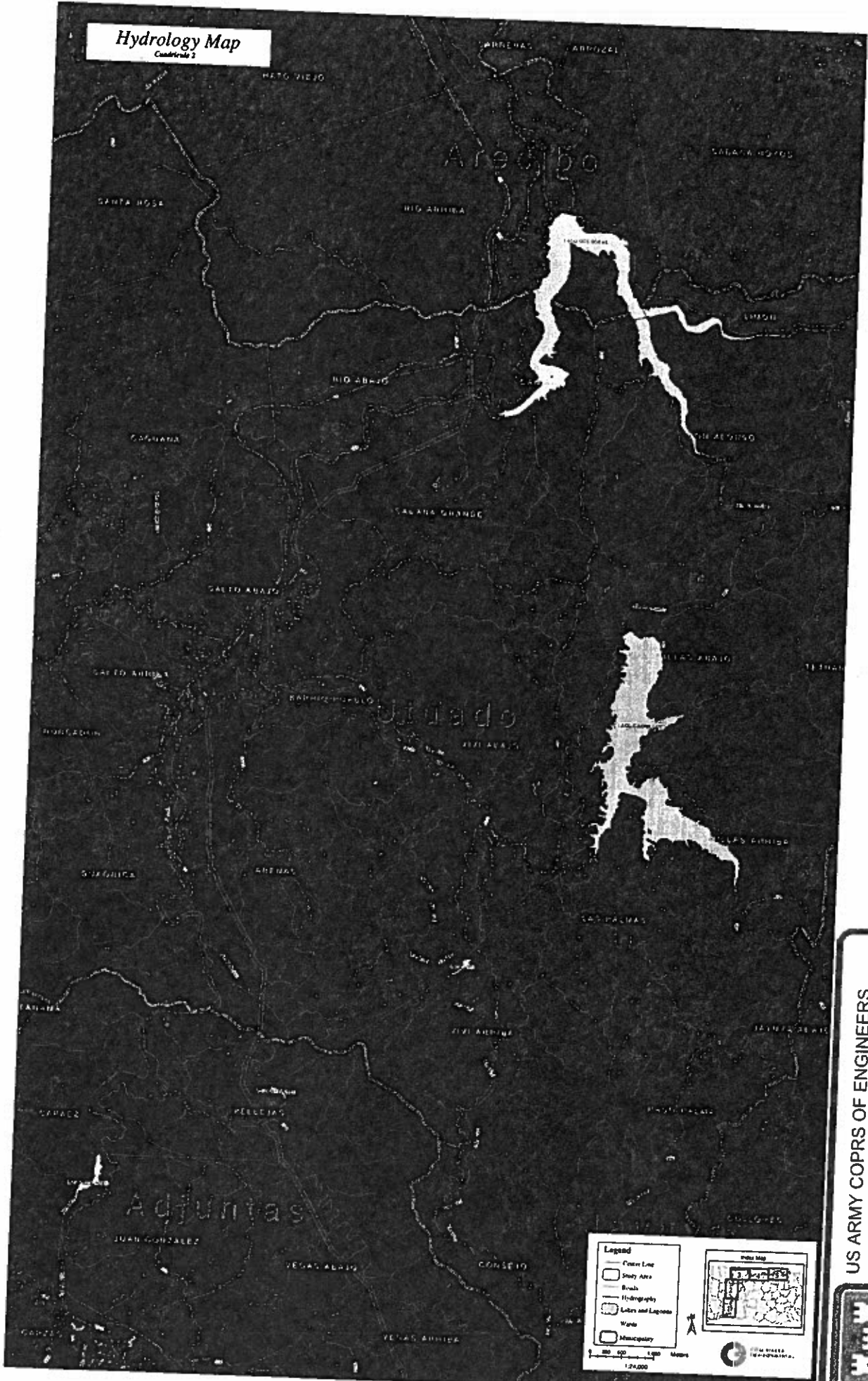
US ARMY CORPS OF ENGINEERS
PERMIT APPLICATION SAJ-2010-02881
DRAWINGS NOV 2010, PAGE 5 OF 16





Hydrology Map

Cuadrícula 2



Legend

- Contour Line
- Study Area
- Breaks
- Hydrography
- Lakes and Lagoons
- Wards
- Municipality

0 500 1000 Meters
1:24,000



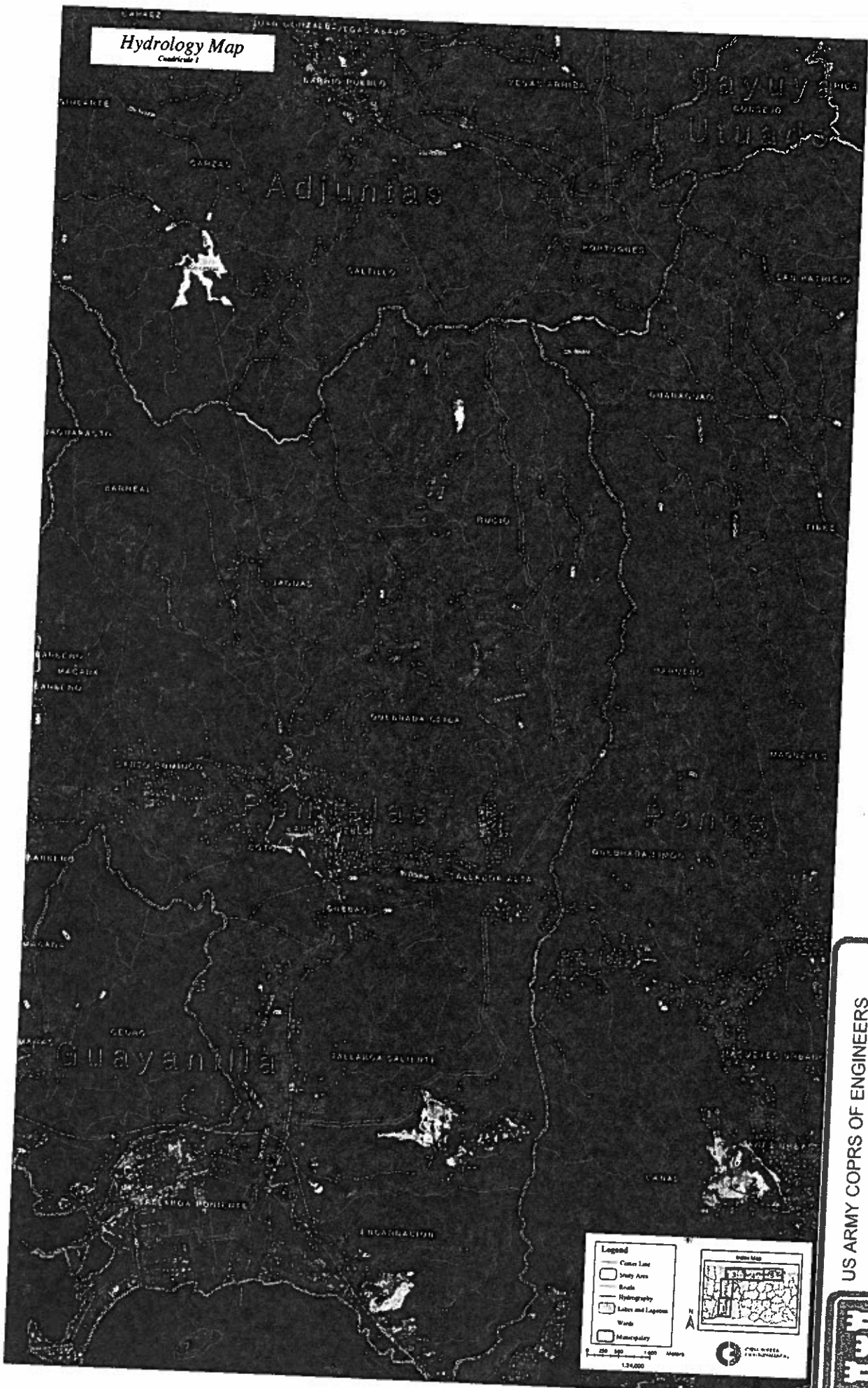
US ARMY CORPS OF ENGINEERS
PERMIT APPLICATION SAJ-2010-02881
DRAWINGS NOV 2010, PAGE 6 OF 16



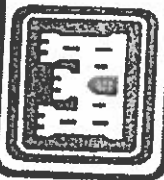


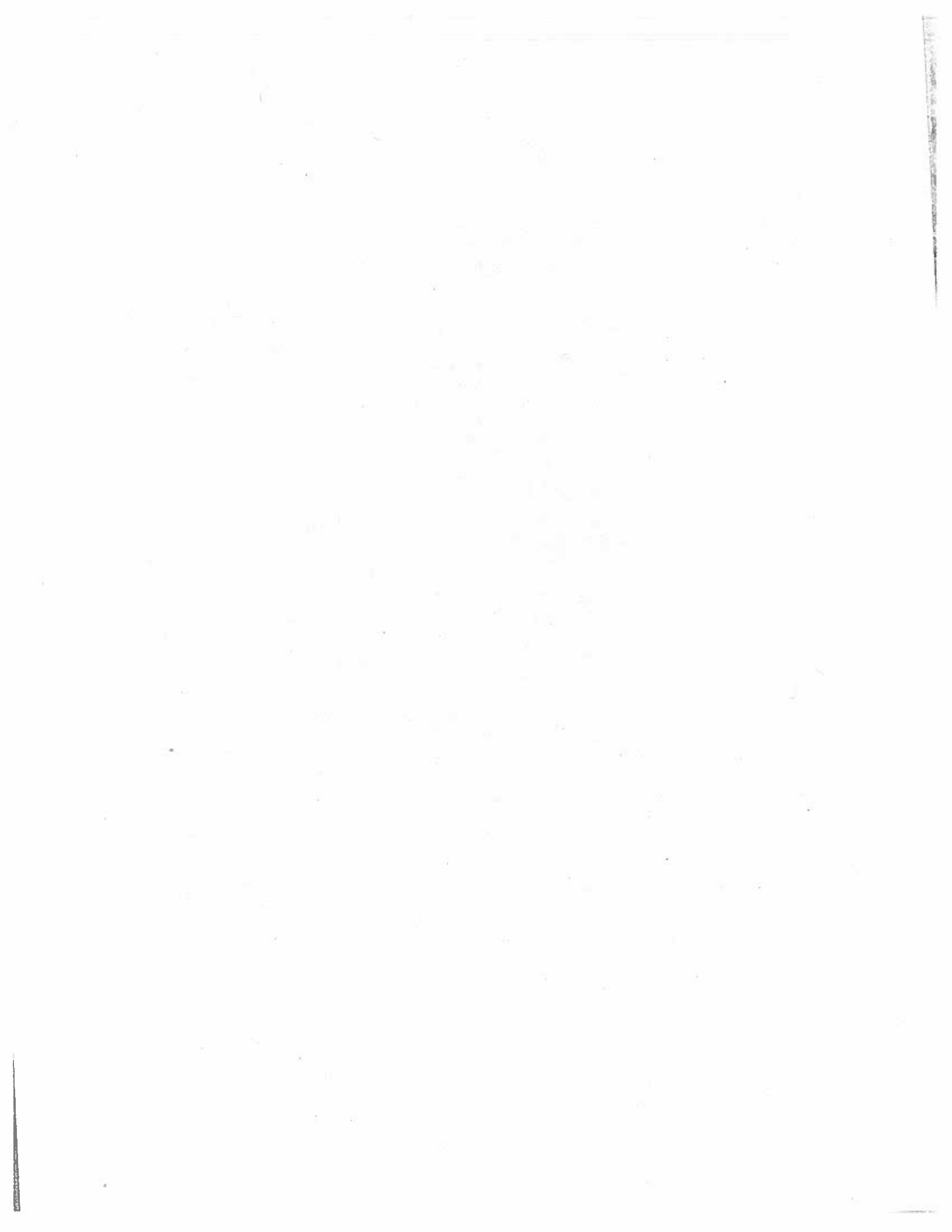
Hydrology Map

Cuadrado 1



US ARMY CORPS OF ENGINEERS
PERMIT APPLICATION SAJ-2010-02881
DRAWINGS NOV 2010, PAGE 7 OF 16







Approximate Wetland Line

Main Via Verde Pipeline

Main Via Verde Pipeline


12-inch Lateral

HDD

Via Verde pipeline

Available Upland Area for 0.5 acre
Metering Station

Arecibo



US ARMY CORPS OF ENGINEERS
 PERMIT APPLICATION SAJ-2010-02881
 DRAWINGS NOV 2010, PAGE 8 OF 16

