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To: <PAIS\_public\_comments@nps.gov>  
cc:  
Subject: Dunn-Peach #2-6 wells EA comments

Padre Island National Seashore  
Attn: Colin Campbell, Superintendent  
PO Box 181300  
Corpus Christi, TX 78480

December 17, 2004

Dear Superintendent Campbell,

Below are the Sierra Club's comments regarding the Environmental Assessment released on November 23 for the Dunn-Peach #2-6 (D-P 2-6) Wells. The Club appreciates the opportunity to comment on this and other projects overseen by the National Park Service. It seems apparent that the National Park Service is working hard to minimize the environmental impacts of this drilling. The Club does have a few questions regarding this plan and the overall accumulative drilling activity on Padre Island National Seashore (PINS).

There is no information in the Environmental Assessment regarding the possibility of subsidence. The Oil and Gas Management Plan for PINS of 2001 states only briefly on page 131 that "the NPS does not anticipate that the potential withdrawal of 80 BCF from an estimated 18 wells over a 30-year period would result in the subsidence of areas of Padre Island." While this may indeed be the case for an estimated 80 BCF of natural gas, the 80 BCF figure is based on what BNP Petroleum, the Texas General Land Office, and at times even NPS, has called "outdated" or "old" information. BNP Petroleum's website states that "Through its analysis of 3-D seismic data collected in the Padre Island 3D shoot, BNP has identified natural gas exploration prospects with reserve potential of several trillion cubic feet of gas." If this is true, then subsidence may play a larger role in this drilling. Considering that the "majority of the park is less than 20 feet above mean sea level," the American public has something to lose.

On page 1, page 12, 1.4, and pages 28-30, the number of alternatives analyzed does not encompass the "all reasonable alternatives" standard that the Council on Environmental Quality requires in its National Environmental Policy Act (NEPA) regulations. Only two alternatives are analyzed. NPS considers but dismisses several other alternatives that are by their very definition, "reasonable". These reasonable alternatives include drilling at other locations; slant drilling; and buying mineral rights so no drilling occurs. While some of these alternatives are not ones the Sierra Club prefers they are "reasonable" and cannot be dismissed by mitigation implemented on other alternatives as NPS has done. Reasonableness is not contingent on how you mitigate another alternative. If all reasonable alternatives were included in this EA, the Sierra Club would advocate for federal acquisition of the mineral rights under the affected area.

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The analysis with respect to the specific quantitative impacts that this proposal and past, present, and

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reasonably foreseeable actions (cumulative impacts) will have is incomplete. For instance, if a compressor is going to be added, the background decibel level, the decibel level of the compressor, the total increased decibel level, how much louder this is than background, what area in feet will this increased decibel limit affect, etc. Instead NPS does not present a straight forward quantification. For instance later in the EA (page 54) NPS gives two background levels. One is 30-45 decibels and one is 62 decibels.

On page 11 and pages 53-56, NPS's description of soundscapes mentions nothing about protecting natural sounds and does not mention solitude or assess the impacts of increased noise on solitude in a separate section. Yet solitude is one of the most important values and benefits that can be derived from a visit to Padre Island National Seashore. This is a major resource oversight that must be corrected.

The cumulative impacts part of the EA, throughout the EA, is woefully inadequate. For instance, NPS mentions that additional wells have been permitted but have not been drilled (Lemon/Lemon Seed Wells, page 13 and 26; Novus Manzano well, page 27) but says nothing about their impacts, cumulatively, and where they will be located in relation to the proposed well. The Sierra Club is unable to find a specified duration limit for the project in the Lemon/Lemon Seed EA (July 2002). It is unclear whether the two projects (L/LS & D-P 2-6) would be operational consecutively or concurrently. If the two projects operate concurrently, it is unclear whether the total amount of heavy trucks allowed to drive up and down the beach would still be limited to 20 large vehicles per day or be limited to 40 vehicles per day. Again, this issue should be clarified.

On page 1, the EA states that, "The purpose of this analysis is to provide a decision-making framework for the NPS to approve the use of parklands for BNP to explore and develop its mineral rights, while protecting and preventing impairment to park resources and values, and allowing for a safe visitor experience; and to determine whether an Environmental Impact Statement (EIS) should be prepared." The Sierra Club advocates that for each EA for oil/gas drilling on PINS that an EIS is needed. This is particularly sensible since the cumulative impacts due to oil/gas drilling and other activities (over 500,000 visitors each year) make it imperative that impacts continue to be analyzed, assessed, and evaluated incrementally each time a new impacting activity is proposed.

At minimum, NPS must prepare an adequate cumulative effects analysis that:

1. Identifies the past, present, and reasonably foreseeable actions of NPS and other parties affecting each particular aspect of the affected environment.
2. Provides quantitative information regarding past changes in habitat quality and quantity, water quality, resource values, and other aspects of the affected environment that are likely to be altered by NPS actions.
3. Must estimate incremental changes in these conditions that will result from NPS actions in combination with actions of other parties, including synergistic effects.
4. Must identify any critical thresholds of environmental concern that may be exceeded by NPS actions in combination with actions of other parties.
5. Must identify specific mitigation measures that will be implemented to reduce or eliminate such effects. The NEPA and the CEQ require that analysis, assessment, and evaluation of cumulative impacts be conducted. See Chapter 1508.7 and 1508.8 of the CEQ regulations which are binding on all federal agencies to implement. See also the CEQ's January 1997 document, "Considering Cumulative Effects Under the National Environmental Policy Act." It is clear that the NPS has an affirmative duty, a statutory duty, and a regulatory duty to carry out cumulative impacts assessment. The NPS in the past has attempted to short-circuit this required duty by suggesting that there are no significant effects. NPS must use the CEQ's "Considering Cumulative Effects Under the National Environmental Policy Act" to conduct a cumulative impacts assessment. Some of the especially important quotes from the CEQ document that NPS must

implement include:

- a. On page v, "Only by reevaluating and modifying alternatives in light of the projected cumulative effects can adverse consequences be effectively avoided or minimized. Considering cumulative effects is also essential to developing appropriate mitigation and monitoring its effectiveness."
- b. On page v, "By evaluating resource impact zones and the life cycle of effects rather than projects, the analyst can properly bound the cumulative effects analysis. Scoping can also facilitate the interagency cooperation needed to identify agency plans and other actions whose effects might overlap those of the proposed action."
- c. On page vi, "When the analyst describes the affected environment, he or she is setting the environmental baseline and thresholds of environmental change that are important for analyzing cumulative effects. Recently developed indicators of ecological integrity (e.g., index of biotic integrity for fish) and landscape conditions (e.g., fragmentation of habitat patches) can be used as benchmarks of accumulated change over time ... GIS technologies provide improved means to analyze historical change in indicators of the condition of resources, ecosystems, and human communities, as well as the relevant stress factors."
- d. On page vi, "Most often, the historical context surrounding the resource is critical to developing these baselines and thresholds and to supporting both imminent and future decision-making."
- e. On page vi "... the consequences of human activities will vary from those that were predicted and mitigated ... therefore, monitoring the accuracy of predictions and the success of mitigation measures is critical."
- f. On page vi, "Special methods are also available to address the unique aspects of cumulative effects, including carrying capacity analysis, ecosystem analysis, economic impacts analysis, and social impact analysis."
- g. On page vii, Table E-1, "CEA Principles ... Cumulative effects analysis ... Address additive, countervailing, and synergistic effects ... Look beyond the life of the action."
- h. On page 1, "The range of actions that must be considered includes not only the projects proposal but all connected and similar actions that could contribute to cumulative effects."
- i. On page 3, "The purpose of cumulative effects analysis, therefore is to ensure that federal decisions consider the full range of consequences of actions ... If cumulative effects become apparent as agency programs are being planned or as larger strategies and policies are developed then potential cumulative effects should be analyzed at that times."
- j. On page 3, Cumulative effects analysis necessarily involves assumptions and uncertainties, but useful information can be put on the decision-making table now ... Important research and monitoring programs can be identified that will improve analyses in the future, but their absence should not be used as a reason for not analyzing cumulative effects to the extent possible now ... adaptive management provisions for flexible project implementation can be incorporated into the selected alternative."
- k. On page 4, "The Federal Highway Administration and state transportation agencies frequently make decisions on highway projects that may not have significant direct environmental effects, but that may induce indirect and cumulative effects by permitting

other development activities that have significant effects on air and water resources at a regional or national scale. The highway and other development activities can reasonably be foreseen as "connected actions."

l. On page 7, "Increasingly, decision makers are recognizing the importance of looking at their projects in the context of other development in the community or region (i.e., of analyzing the cumulative effects) ... Without a definitive threshold, the NEPA practitioner should compare the cumulative effects of multiple actions with appropriate national, regional, state, or community goals to determine whether the total effect is significant ... Cumulative effects results from spatial (geographic) and temporal (time) crowding of environmental perturbations. The effects of human activities will accumulate when a second perturbation occurs at a site before the ecosystem can fully rebound from the effect of the first perturbation."

m. On page 8, Table 1-2, lists 8 principles of cumulative effects analysis. A summary of summary of these principles includes:

- i. Cumulative effects are caused by the aggregate of past, present, and reasonably foreseeable future actions.
- ii. Cumulative effects are the total effect, including both direct and indirect effects, on a given resource, ecosystem, and human community of all actions taken no matter who has taken the actions.
- iii. Cumulative effects needs to be analyzed in terms of than specific resource, ecosystem, and human community being affected.
- iv. It is not practical to analyze the cumulative effects of an action on the universe; the list of environmental effects must focus on those that are truly meaningful.
- v. Cumulative effects on a given resource, ecosystem, and human community are rarely aligned with political or administrative boundaries.
- vi. Cumulative effects may result form the accumulation of similar effects or the synergistic interaction of different effects.
- vii. Cumulative effects may last for many years beyond the life of the action that caused the effects.
- viii. Each affected resource, ecosystem, and human community must be analyzed in term of its capacity to accommodate additional effects, based on its own time and space parameters.

n. On page 19, "The first step in identifying future actions is to investigate the plans of the proponent agency and other agencies in the area. Commonly, analysts only include those plans for actions which are funded or for which other NEPA analysis is being prepared. This approach does not meet the letter or intent of CEQ's regulations ... The analyst should develop guidelines as to what constitutes "reasonably foreseeable future actions" based on planning process within each agency ... In many cases, local government planning agencies can provide useful information on the likely future development of the region, such as master plans. Local zoning requirements, water supply plans, economic development plans, and various permitting records will help in identifying reasonably foreseeable private actions ... These plans can be considered in the analysis, but it is important to indicate in the NEPA analysis whether these plans were presented by the private party responsible for originating the action. Whenever

speculative projections of future development are used, the analyst should provide an explicit description of the assumptions involved ... NEPA litigation ... has made it clear that "reasonable forecasting" is implicit in NEPA and that it is the responsibility of federal agencies to predict the environmental effects of proposed actions before they are fully known.

o. On page 23, "Characterizing the affected environment in a NEPA analysis that addresses cumulative effects requires special attention to defining baseline conditions. These baseline conditions provide the context for evaluating environmental consequences and should include historical cumulative effects to the extent feasible.

p. On page 29, "Lastly, trends analysis of change in the extent and magnitude of stresses is critical for projecting the future cumulative effects.

q. On page 29, "Government regulations and administrative standards ... often influence developmental activity and the resultant cumulative stress on resources, ecosystems, and human communities.

r. On page 31, "Cumulative effects occur through the accumulation of effects over varying periods of time. For this reason, an understanding of the historical context of effects is critical to assessing the direct, indirect, and cumulative effects of proposed actions. Trends data can be used ... to establish the baseline for the affected environment more accurately (i.e., by incorporating variation over time) ... to evaluate the significance of effects relative to historical degradation (i.e., by helping to estimate how close the resource is to a threshold of degradation) ... to predict the effects of the actions (i.e., by using the model of cause and effects established by past actions)."

s. On pages 38-40, "Using information gathered to describe the affected environment, the factors that affect resources (i.e., the causes in the cause-and-effect relationships) can be identified and a conceptual model of cause and effect developed ... The cause-and-effect model can aid in the identification of past, present, and future actions that should be considered in the analysis ... The cause-and effect relationships for each resource are used to determine the magnitude of the cumulative effect resulting from all actions included in the analysis ... one of the most useful approaches for determining the likely response of the resource ... to environmental change is to evaluate the historical effects of activities similar to those under consideration.

t. On page 41, "The analyst's primary goal is to determine the magnitude and significance of the environmental consequences of the proposed action in the context of the cumulative effects of other past, present, and future actions ... The critical element in this conceptual model is defining an appropriate baseline or threshold condition of the resource.

u. On page 43, "Situations can arise where an incremental effect that exceeds the threshold of concern for cumulative effects results, not from the proposed action, but the reasonably foreseeable but still uncertain future actions.

v. On page 45, "The significance of effects should be determined based on context and intensity ... Intensity refers to the severity of effect ... As discussed above, the magnitude of an effect reflects relative size or amount of an effect. Geographic extent considers how widespread the effect might be. Duration and frequency refers to whether the effect is a one-time event, intermittent, or chronic.

w. On page 45, "Determinations of significance ... are the focus of analysis because they lead to additional (more costly) analysis or to inclusion of additional mitigation (or a detailed justification for not implementing mitigation) ... the project proponent should avoid, minimize, or mitigate adverse effects by modifying alternatives ... in most cases,

however, avoidance or minimization are more effective than remediating unwanted effects."

- x. On page 51, "different resource effects that cumulatively affect interconnected systems must be addressed in combination."

The NPS must utilize the CEQ document referenced above to the maximum extent possible so that a full and legal cumulative impacts assessment is conducted.

There is no specific quantitative cumulative impact assessment for any past, present, and reasonably future foreseeable action in the past EAs. NPS is deficient in its cumulative impacts assessment. Where are the impacts from other oil/gas activities? Where are the impacts from roads? Where are the impacts from recreation? NPS must prepare an EIS that assesses all cumulative impacts in addition to all potential impacts from the BNP well.

6. On page 1, third paragraph, NPS states that "NPS must decide whether to approve the plan and if so if additional mitigation measures are needed." This is incorrect. NPS must decide first, whether to allow drilling. Otherwise it has biased the process by making the assumption that drilling is okay and all that is required is approval of the Plan of Operations (POO). The same is true for page 2, 1.1 Objectives of Taking Action. The objective is not to allow drilling but to determine if wells can be drilled without impairment to the natural resources that Padre Island National Seashore has. See page 3, 1.2.1, the Organic Act quotation, which should be in any objective NPS has for this proposal. NPS shows its bias here with a predetermined outcome since it is not supposed to assume drilling will occur.

7. On page 3, 1.2.1, fourth paragraph, we need to argue that impairment is occurring and that the mitigation provided is insufficient.

8. On page 4, 1.2.1, second paragraph, NPS states, "An impact would be less likely to constitute impairment to the extent that it is an unavoidable result, which cannot be reasonably further mitigated, of an action necessary to preserve or restore the integrity of park resources or values." This is a ridiculous and undocumented assumption and assertion. Impairment has nothing to do with whether an impact can or cannot be mitigated. Read the definition of impairment on page 3. NPS is trying to say something that is not in its definition and we need to call them on it.

9. On page 4, 1.2.2, second paragraph, NPS states that it "is legally required to allow access to minerals while applying resource protection requirements and ensuring adherence to federal and state regulations, policies, and guidelines." NPS does not state what it should here, only if the action does not "impair" natural resources. NPS needs to be called on this.

10. On page 9, 1.3, NPS states that it did not receive scoping comments. This is bad for us. The Sierra Club must respond to each scoping notice. The Sierra Club must formally request NPS that it wants to be notified of each scoping opportunity for oil/gas activities and all activities on Padre Island National Seashore that require NEPA.

11. On page 10, and throughout this section of the EA, NPS never states how many oil spills or other spills are expected over the lifetime of the wells. This can be determined by looking at past spill data over a period of time (number of spills divided by number of years spill data covers for spills/year).

12. On page 13, 1.4.1, third paragraph, NPS states that a serious spill would be a "rare event" and its likelihood is "very small" but gives no documentation to demonstrate that this is the case. NPS also says that there would be a "low intensity of impact" to economics but does not define what this means and what documentation NPS has to support this assertion. NPS says nothing about the huge economic impact that a spill would have on tourism and visitation.

13. On pages 14-15, 1.4.5 Air Quality, NPS should not dismiss this impact since there could be significant air emissions from compressors, flares, spills, releases, fugitive leaks, truck emissions, construction equipment, other vehicles, road dust, sand blowouts, etc. If NPS is going to make this assertion it should have to show both for this proposal and cumulatively what the emissions are of air pollutants that will be released (NOx, SO2, H2S, CO, CO2, VOC, air toxics, etc.). NPS says "localized, negligible to minor, adverse impacts for both the proposal and cumulative impacts but does not define this so how can the public review, comment, and understand their assertions?"

14. On page 17, 2.2, Location of the Well, GPS readings do not tell the public anything about where the well is.

15. On page 19, Use of Water for Drilling, a total of about 1.2 million gallons will be used for drilling these wells. Seems like a lot of water to me.

16. On page 21, Production Facility, it is not clear how much produced water, drilling mud, drill cuttings, and other wastes will be produced and exactly what will happen to them. How will the oil (NPs says it will have "oil, water, and gas" production) be transported.

17. On page 35, Visitor Use and Experience, NPS gives the same impact assessment to the "no action" alternative as to the drilling of 5 well alternative for cumulative impacts. NPS rates both of them as "short to long-term, minor to moderate, adverse impacts." This is not possible since one alternative has the drilling of 5 more wells so there will be those additional cumulative impacts. NPS does this frequently by giving both the "no action" alternative and the drilling alternative the same or similar impacts.

18. On page 37, Methodology and Cumulative Impacts, NPS is not clear what the "project area" (second paragraph) and the "analysis area" (fourth paragraph) are. This needs to be stated clearly so the public and decision maker will know.

19. On page 38, Adjacent Land Uses, the NPS does not describe what the impacts are of these activities on Padre Island National Seashore as part of its cumulative impact assessment process.

20. On page 38 and throughout this document, Methodology, NPS does not define key words in its definition of negligible, minor, moderate, and major. What does "so small that it would not be of any measurable or perceptible consequence"; "small and of little consequence"; "the change would be measurable and of consequence"; "noticeable change"; and result in a severely adverse or major beneficial impact" mean? In the methodology used for other natural resources (like natural soundscapes on page 54) NPS uses the undefined phrases "barely detectable"; slight but detectable"; readily apparent"; and "severely adverse". What do these mean? The public has a right to know and to review, comment, and understand these phrase that quantify impacts.

21. On pages 38-39, Affected Environment and on page 43, Affected Environment, note that the "depth to water" is "30 inches" or "Ground water at the site is approximately two to five feet deep, depending upon the season." This is of concern due to spills and leaks and groundwater contamination of shallow water aquifers. NPS does not state the possibility of contamination of such aquifers which may be important for wildlife. NPS should require water sampling before and after drilling. If contamination is found then clean-up must be required.

22. On pages 39-40 and for every natural resource analyzed through page 99, notice NPS repeats the cumulative impacts in the "Impacts of Alternative A" part of the analysis. This means that the appearance to the reader is that there are a lot of impacts due to the "no action" alternative when in fact there are none. In fact NPS states in the first sentence under Impacts of Alternative A, No Action, on Geology and Soils that "Under Alternative A, No Action, the Dunn-Peach # 2, 3, 4, 5, and 6 wells would not be drilled, resulting in no new impacts on geology and soils." This is all that needs to be said for this section. But then NPS repeats the cumulative

impacts language which it will say or refer to again under "Cumulative Impacts" section of the analysis. What a sneaky way to try to make the "no action" alternative look bad to the reviewer of the EA.

23. On page 40, Cumulative Impacts, NPS states that future drilling will be up to 16 wells but on page 13, NPS states that the figure would be 18 wells over 30 years. Why the difference?

24. On pages 50-53, 3.4 Impacts on Vegetation, NPS never says how much of each vegetation type that it discusses will be destroyed or damaged by this proposal and have been cumulatively impacted by actions in the past.

25. On page 55, 3.5 Impacts to Natural Soundscapes, the cumulative impacts due to other wells and actions in decibels is never given so the public cannot review, comment, and understand the analysis.

26. On page 76, Impacts of Alternative A, No Action, on Sea Turtles, the assertion by NPS that "Recent nesting activity seems to support the idea that existing traffic levels ... do not currently have a measurable effect on nesting sea turtles" is contradictory to what NPS has stated previously. NPS stated that it is difficult to find nests and that it cannot be assumed that the level of monitoring finds all the nests. How then can NPS state so baldly that the information supports that there is no measurable effect especially since so few nests have been found that if one is destroyed this would be a significant percentage of loss to all nests found?

27. On pages 95-99, 3.8 Impacts on Visitor Use and Experience, NPS does not quantify or mention the enormous impacts on tourism and recreation if a significant spill occurred on Padre Island National Seashore. Therefore it cannot state that cumulative impacts on page 99 would be "negligible to moderate adverse impacts". Again, NPS must define under Methodology, the phrases under "negligible, minor, moderate, major" that are not quantified (barely, slightly, readily apparent, and severely).

It is readily apparent that NPS needs to:

1. Cease work on the EA.
2. That an EIS be prepared for the BNP well.
3. That the BNP EIS have a complete qualitative and quantitative cumulative effects analysis, assessment, and evaluation based on the CEQ document, "Considering Cumulative Effects Under the National Environmental Policy Act".
4. That the comment period be at least 60 days for the EIS.

The Sierra Club appreciates the opportunity to comment on this and other documents that NPS provides.

Sincerely,

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"It takes not only the dreamers, the believers, the legislators, it will also take the keepers - the watchful stewards - for a national belonging such as Padre Island." - Lady Bird Johnson, April 8, 1968