

As noted in the 2000 FEIS (p. 3-11) for Padre Island N S Oil and Gas Plan, cumulative impacts on visitor use and experience would be the result of human developments on the natural scenery on

- 411 acres from existing oil and gas wells, production facilities, and pipelines;
 - (11.49+ 5.85 = 17.34) wells & production = 11.49, pipelines
- 748 acres, could be directly impacted by park wide 3D seismic exploration (FEIS, 4-31)
- 250 acres, upland vegetation with the development of 18 wells projected ;
- under the NPS Reasonably Foreseeable Development (RFD) scenario
- [impacts on up to 998 acres [250 + 748], estimated that 50% of total
- RFD acreage would fall into wetlands (FEIS, 2/1-10)
-
- Some park oil and gas operations could cause elevated noise levels and odors. Human health and safety hazards involve the potential for visitors to come into contact with leaked and spilled hydrocarbon and contaminating or hazardous substances at oil and gas operations. With the application of mitigation measures detailed in the 2000 FEIS, existing and potential impacts on visitor use and experience would result in cumulative, short- to long-term, minor to moderate adverse impacts in localized areas.

Currently: in FEIS, 2000

6 oil and gas operations (FEIS 3/18)

- Vector Energy (A-3, A-4, A-8)
- EOG aka Enron South Sprint, 2 wells
- Louis Dreyfus Nat. Gas Restoration in progress
- Fina Oil & Chemical (1 oil well ST 181-1), P&A
- Chevron USA – Restoration in progress
- Sunmark No 2, P&A, debris / remnants of caliche pad ???

1 salt water disposal well

Vector A-6

7 pipelines in park (FEIS 3/21)

- -Dominion aka (Petrotex) (Chartex), Six pigs runs offshore
- - Duke (Tx Trans Eastern), near Novillo GONE
- - Duke Energy (PanEnergy), center of island (26 miles) – not in compliance at this time
- - AEP/HPL, YBP to 6 pigs, 12 inch pipe, 12 miles
 - 24 inch pipeline, 6 pigs across Laguna Madre (8.5 miles)
This line runs in parallel to beach 77 miles south in state waters.
 - 10 inch pipeline, 6 pigs north 3 miles
- - Williams Field Services (Transco), 24 inch pipeline, 3 miles
- across island from Gulf to Laguna Madre at the 18-mile-
- marker ~~?????~~

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Oil and Gas Operations

1. Vector Energy (A-3, A-4, A-8)
2. EOG (Enron South Sprint) 2 wells
3. Louis Dreyfus Natural Gas – restoration in progress
4. Chevron USA – restoration in progress
5. Sunmark No. 2, P&A, debris / remnants of caliche pad ??
6. BNP – Lemon (not drilled to date)
7. Novus – Dunn Murdock 1 well
Lemon Seed (not drilled to date)

1 salt water disposal well (Vector A-6)

Pipelines

1. MIG (Dominion, (Petrotex) (Chartex) Six Pigs 20 inch from offshore, 818 Block
2. Duke Energy (Pan Energy), 10 inch running down center of island for 26 miles, NOT in compliance at this time
3. AEP (HPL) Six Pigs to YBP (12 miles) 12 inch pipeline
24 inch pipeline, runs 77 miles parallel to beach South in state waters
10 inch pipeline, 6 pigs north for 3 miles
4. Williams Field Service (Transco) – 24 inch pipeline runs 3 miles across the island from offshore. The yellow markers at the 18-mile marker

TOTALS:

13 Oil and Gas operations (.7 operators + 6 pipelines)

Calculations

FEIS 2000:

The 66.24 mile at 400 acres on p. 3/21 is an error – use the 54.25 distance from the table.

Can not duplicate the 411 acres stated in the EIS

54.25 miles

5280 x 520 feet = 286,440 feet

x 50 foot corridor = 14,322,000 square feet

div. 43560 or x .000023 to get acres

328.70

or 329.406 acres

add existing disturbances 11.49 & 585

346.13 acres or 346.846 acres

pipeline
op wells + roads (17.34)

Acreage previously disturbed using 364.5 acres instead of the 411 acres

346.75

(347)

need to add

Dunn-Murdoch

~~2.18~~ acres
2.2

Dunn-Perch.

6.05

346.75 disturbed

~~add back~~ - restored

~~347~~ 346.13 + .25 Fina

346.13 Terns Eastern

3.25 miles

+ 6.08

~~353.08~~ 340.37

3.25 miles

= ~~302.672~~

6.08

new
dist.

+ 8.25 Dunn & Perch.

~~344.83~~

348.87

plans of operations. Four operations, including one abandoned production facility have ongoing clean-up and remediation activities associated with releases of oil and gas and other contaminating or hazardous substances (South Sprint Facility, Vector A-6, American Exploration/Louis Dreyfus abandoned production facility, and the former Chevron USA Onshore Production Facility). Until cleanup is successfully completed, impacts on park resources and values persist.

Two existing gas pipelines are located within the analysis area of the proposed project. AEP operates and maintains a 12-inch pipeline 3,700 feet west of the proposed wellsite. Duke Energy owns a currently inactive 10-inch pipeline located 4,300 feet east of the proposed wellsite. The AEP pipeline is the sales line for the Dunn-Peach #1 and BNP proposes to tie any additional producing wells into the AEP system. Also included in the analysis area of the proposed Dunn-Peach #2, 3, 4, 5, and 6 wells is a 6.9 mile segment of Gulf beach that BNP would use to access its well. This 6.9 mile segment of Gulf beach is currently used by 13 nonfederal oil and gas operators to access existing operations located throughout the park, by park staff to conduct routine park operations, and by an estimated 278,458 park visitors (73% of annual Gulf beach visitation or 49% of annual Park visitation) for vehicular access.

Visitation Calculations

568,732	total visitation for 2003
210,430	37% of total use Bird Island Basin
187,283	BIB only
23,147	11% of BIB users also use Gulf beaches
381,449	Gulf beach users
102,991	27% from the zero North only
144,950	38% use Gulf beach zero to 10 mile marker
101,465	70% use Gulf beach zero to 5 mile marker
43,485	use Gulf beach 5 – 10 mile marker
133,449	35 % use Gulf beach 10 mile mark to the channel
278,458	73% of south beach users or 49% total visitation

In 1999, the NPS prepared a reasonably foreseeable development (RFD) scenario for inclusion in the park's Draft Oil and Gas Management Plan/Environmental Impact Statement. The RFD projects that three-dimensional seismic surveys could be conducted over the entire park and up to 18 wells could be drilled and produced over the next 30 years to develop the 80 billion cubic feet of natural gas estimated by the U.S. Geological Survey that remains beneath the park. The NPS projects that 3-D seismic surveys would directly impact up to 748 acres; and the 18 wells and associated construction of roads, well and production pads, and flowlines would directly impact up to 250 acres, for a total direct surface use of up to 998 acres or 0.77% of the park. It is expected that 3-D seismic surveys would result in short-term impacts lasting no more than 3 years until reclamation is satisfactorily achieved. It is reasonable to assume that, as some wells are being drilled and produced that others would be plugged and abandoned. As of 2001, 3-D seismic surveys have been completed over the northern three-quarters of the park. There are negligible to minor impacts on park resources and values from those seismic surveys. In June 2002, BNP drilled the Dunn-Murdock #1 well in the vicinity of the Yarrowborough Pass boat dock. This constituted the first of the possible 18 wells that the NPS's RFD scenario projected could be drilled over the next 30 years. April of 2004, BNP drilled the Dunn-Peach #1 well, directly disturbing 6.047 total acreage within the park. Two additional wells, Lemon/Lemon Seed Wells, have been permitted, but construction of these two wells has not begun to date.

flowline placement would be localized, minor, and short-term during construction and re-vegetation activities.

The potential for leaks and spills exists during all phases of oil and gas operations, resulting in impacts that could be localized, with minor to major, short-term adverse impacts on geology and soils; however, with the mitigation measures included with this alternative, the intensity of impacts would be reduced.

Cumulative Impacts

Under Alternative B, Proposed Action, cumulative impacts on geology and soils throughout the park would be similar to those described under No Action, with impacts from existing and future oil and gas operations in and adjacent to the park, park developments and operations, dredging and maintenance of the Intracoastal Waterway and other channels in the Laguna Madre near the park, resulting in short to long-term, negligible to minor adverse impacts localized near developments. In the event of a spill from offshore oil and gas operations or tankers, impacts could be long-term and widespread, ranging from negligible to moderate adverse impacts.

Maintenance of the access road / flowline route, production facility, and expanded well pad for the proposed Dunn-Peach # 2, 3, 4, 5, and 6 wells would directly impact up to 7.08 acres, resulting in the long-term loss of soil productivity and localized, short- to long-term, negligible to minor, adverse impacts on geology and soils in the analysis area.

Conclusion

Under Alternative B, Proposed Action, the Dunn-Peach #2, 3, 4, 5, and 6 wells would be drilled and could possibly produce hydrocarbons, resulting in the short-term disturbance to geology and soils on up to 7.08 acres, and the long-term occupancy of 3.08 acres. Maintenance of the access road / flowline route, and production facility; well pad expansion, drilling and producing the wells, in addition to existing activities within the analysis area, would result in localized, short to long-term negligible to minor, adverse impacts on geology and soils. Cumulative impacts would be similar to those described under Alternative A, No Action, with short- to long-term, negligible to moderate, adverse impacts on geology and soils throughout the park. No impairment to geology and soils would result from implementation of this alternative.

Breakddown of Acreage Calculations

Proposed	Existing	Cumulative	Longterm
Expansion	2.28 acres well pad	3.52 acres well pad	7.08 acres
1.24 acres well pad	3.40 acres road /	3.40 acres road /	<u>disturbance</u>
	flowline	flowline	- 1.50 acres well pad
	<u>0.16 acres pull outs</u>	<u>0.16 acres pull outs</u>	- 1.7 acres reveg.
	5.84 acres disturbed	7.08 acres	<u>Pipeline (1yr)</u>
		disturbance	3.08 acres longterm
			disturbance

3.2. Impacts on Water Resources and Floodplains

Methodology

To analyze the impacts on water resources and floodplains, all available information on water resources and floodplains in the park was compiled including: personal observations, consultation with other agencies, the parks approved Oil and Gas Management Plan, other park documents, and landcover classification data.