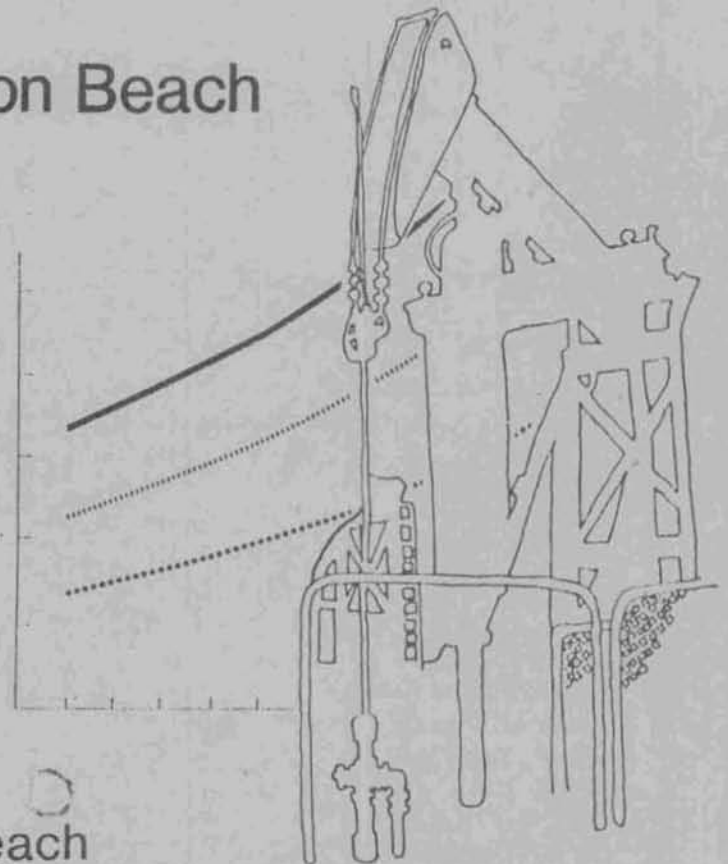


Huntington Beach Energy Series

Report #2

# Fiscal Impact of Oil Operations in Huntington Beach



City of Huntington Beach

Department of Development Services

Planning Division

March, 1981

**CITY OF HUNTINGTON BEACH**

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FISCAL IMPACTS OF OIL OPERATIONS  
IN  
HUNTINGTON BEACH

CITY OF HUNTINGTON BEACH  
DEPARTMENT OF DEVELOPMENT SERVICES  
JAMES W. PALIN, DIRECTOR

MARCH, 1981

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# Foreword

This is another in a series of discussion papers on energy-related issues prepared by the Planning Division of the City of Huntington Beach. Huntington Beach is a center for many energy-related activities including onshore and offshore oil production, an electricity-generating power plant, and increasingly, solar and conservation technologies. The purpose of these reports is to help the City to accommodate the continued production of so vital a resource as energy while at the same time mitigating as much as possible any adverse impacts on the community that such activities might incur. Other reports in this series include the following:

- #1 Preserving Surface Access to Underground Oil Reserves in Developed Areas
- #3 Oil Spill Contingency Planning in Huntington Beach
- #4 Enhanced Oil Recovery Technology
- #5 Solar and Conservation Policies at the Local Level

This publication was prepared with financial assistance from the U.S. Office of Coastal Zone Management, National Oceanic and Atmospheric Administration, under the provisions of the Federal Coastal Zone Management Act of 1972, as amended, and from the California Coastal Commission under the provisions of the Coastal Act of 1976.

## Definitions

This report necessarily discusses some technical aspects of the oil industry and of fiscal impact analysis. Consequently, some terms are used which may not be familiar to the reader. The following definitions section was prepared to help clarify the meaning of some of these terms. To ease reference, all words defined in this section are italicized the first time they appear in the report's text.

Enhanced Recovery: Any production method which is used to recover more oil from a petroleum reservoir than could be obtained by natural reservoir energy or simple pumping. Includes water flood, steam flood and other techniques involving injection of fluids into the reservoir to recover additional oil.

Expenditures: Monies spent by the City to provide goods and services to the landowners, residents, workers and visitors of the City.

Fiscal Impacts: In this report refers to revenues received and expenditures incurred by the City as a result of particular land uses or activities occurring in Huntington Beach.

Net Revenues: The revenues remaining and available to the City after total expenditures are subtracted from total revenues.

Opportunity Cost: Costs associated with choosing one option over other ones when that choice precludes the alternatives. By making that choice, benefits that might have resulted from the precluded alternatives are lost.

Primary Production: Oil driven up through wells by natural pressure in the formation or by pumping units, without injecting water or other fluids to help force the oil to the surface.

Recycling: In this context, refers to the redevelopment of the surface area of an oil field for uses such as housing or commerce.

Revenues: The monies or income the City receives; sources include taxes, fees, rents and franchises.

Scenarios: In this report, refers to a set of events or conditions possible in the future; a future possibility.

Unitization: The process of forming a "unit"; a unit is an entity composed of several oil operators which work a common oil pool in order to share equipment and mineral interests to produce the reservoir as a single party. When the interests in the pool are fragmented, units are essential for the use of most enhanced recovery methods which can best be applied on a coordinated, non-competitive basis.

Waterflood: An enhanced recovery program through which water is injected into a reservoir in order to force more oil from the pores in the rock.

Water Injection: Another term for "waterflood".





















consumer price index, and, thus, increases as the cost of living rises. The oil production license fee rates for 1979-80 were 11.05¢/barrel for "non-stripper" wells (wells that produce more than ten barrels per day) and 8.84¢/barrel for "stripper" wells (wells that produce less than 10 barrels per day). Each oil operator also pays an annual \$100 business license fee per well.

The oil production fee is paid quarterly, and the operator may deduct up to \$25 per quarter as reimbursement for the license fee. In other words, the first \$25 of the quarterly oil production fee is paid in advance, in the form of a business license fee. The total revenue collected from this source was \$1,076,996 for 1979-80.<sup>6</sup>

Oil Well Inspection Fee: Each oil well is inspected annually for compliance with the Huntington Beach Oil Code. The oil inspector must approve each well before a business license is issued. There is a \$50 inspection fee per well. Total revenue from oil well inspections was \$73,000 for 1979-80.

Wastewater Permits: Every well that uses the City's wastewater system must pay an annual \$30 wastewater fee. There are 322 wells using the system. Total revenues were \$9,660 for 1979-80.<sup>7</sup>

Drilling/Redrilling Permits: In order to drill or redrill an oil well, an operator must secure a permit from the oil inspector. There is a \$500 fee for each permit approved. In 1979-80, 13 drilling/redrilling permits were issued, generating a revenue of \$6,500.<sup>8</sup>

Pipeline Franchises: Oil companies that have pipelines in Huntington Beach pay franchise taxes whose rates are established by contracts with the City. The term of the contracts vary from franchise to franchise. Revenues from this source were \$4,253 for 1979-80 for pipelines directly related to oil production in Huntington Beach.<sup>9</sup>

(Some pipelines are not related to oil production here - that is, even if there were no oil production in Huntington Beach these pipelines would continue to be used. They are used for transporting crude oil delivered by tanker or for carrying gas or refined products.)

Royalties and Easements: As a result of legislation in the 1930's, the City receives royalty payments from the sale of oil produced on offshore lease Public Resources Code 392. The royalty is approximately .25 percent of those sales, and therefore, contingent on oil prices and the amount produced - two variables that are very difficult to predict. In 1979-80, the City received \$120,000 from this source.<sup>10</sup>

## 2.3 Conclusion

The analysis for 1979-80 indicates that oil production contributes significant revenues to the City, totaling approximately \$1.67 million. Approximately two-thirds of these revenues come from the oil production fee (per barrel) which is tied directly to production. This fee also increases annually with an index of the inflation rate; thus, this revenue source can keep pace to a significant degree with rising expenditure levels.

The estimated City expenditures related to oil production for 1979-80 were approximately \$.87 million. Three departments--fire, police and public works--account for about two-thirds of these; expenditures by all other departments combined for the remaining one third of the total.

Clearly, oil production activities currently generate net revenues to the City. The next section analyzes how this fiscal situation might change in the future, considering variables such as changing production levels, inflation, and pressures to redevelop the oil fields to new uses.







using the City-wide Fiscal Impact Model and the City's General Plan, which helps define the future growth pattern and mix of uses in the City. These total annual expenditure estimates were used to calculate oil's share of City expenditures which are not directly assignable.

A ten percent inflation rate is also assumed.<sup>11</sup>

In summary, the following assumptions have been made for the analysis in Sections 3.2 - 3.5:

- Proposition 13 controls on tax rates and property assessments will apply.
- The City's share of the property tax will remain 20.7 percent.
- Rates on drilling permits and other fees will not change.
- Total City expenditures are estimated using the City-wide Fiscal Model and the General Plan.
- Level of City services stays constant.
- Inflation will average ten percent per year.

### 3.3 Analysis of Scenarios

In all of the following scenarios, expenditures are calculated two ways. The first method uses the "Weighted Average Model" developed in Appendix A because it is probably the most accurate and reasonable of the available models for calculating oil-related expenditures. Expenditures are also predicted based on the City-wide Model because it is the technique used in many previous analyses and it gives the highest cost estimates of all the models analyzed in Appendix A. Both models were used to plot expenditure curves in all of the figures in this section; thus, each figure shows two expenditure lines. Perhaps the best way to interpret these graphs is to view the

Weighted Average Model's expenditure line as our best estimate of what City expenditures will actually be, and the City-wide Model's expenditure line as an estimate of the probable maximum or upper limit of actual expenditures.

#### Scenario 1 - Oil Revenues and Expenditures, 1980-1990: Oil Operations Remain Relatively Unchanged.

In this scenario, the current number of wells (1460) remains through 1990. The area devoted to oil stays at 472 acres and overall production is constant.

Revenues derived from the oil production fees and royalties rise 10 percent per year which is the assumed inflation rate. Property tax revenues rise at only two percent per year due to Proposition 13 limitations. All other revenues remain the same, assuming that the same number of permits is issued each year, and that fee rates do not change. Overall, revenues increase, but not as fast as expenditures.

Figure 3.1a shows oil revenues and expenditures for 1980-90. Under Scenario 1, oil operations are a net revenue generator for the City under the assumed conditions primarily because the oil production fee, which makes up two-thirds of the revenue, is tied to the Consumer Price Index; therefore, this portion of the revenues keeps pace with inflation.

Figure 3.1b shows the same scenario in "constant (1979) dollars," that is, the revenues and expenditures are adjusted for inflation. This figure shows more clearly that net revenues (reflected in the distance between the revenue line and the expenditure lines) decrease over time. This is because one-third of the revenues generated by oil are not indexed to the inflation rate. In other words, total revenues simply do not keep up with inflation. Despite this decline, oil operations would continue to contribute net revenues throughout the decade.











































## APPENDIX B

### Revenues From Other Energy Facilities

Although this report focuses on oil operations, there are other energy facilities in the City and coastal zone. These include a Gulf Oil Company tank farm and affiliated pipeline franchises; a Chevron USA tank farm; a Southern California Edison Company power plant, tank farm and pipeline and utility franchises; and other pipeline and utility franchises. These facilities are likely to remain in Huntington Beach for some time.

Because of their permanent nature, a fiscal analysis of these operations is much less relevant than a similar analysis of the "less permanent" oil operations. It is important to note, however, that the City derives significant revenues from these facilities. These revenues figures are presented below.

The revenues for 1979-80 are as follows.

#### Gulf Tank Farm:

Property Tax	\$ 6,690
Pipeline Franchise	6,047
TOTAL	<u>\$ 12,737</u>

#### Chevron Tank Farm:

Property Tax	\$ 4,281
TOTAL	<u>\$ 4,281</u>

#### Edison Plant and Tank Farm:

Property Tax	\$364,263
Pipeline Franchise	4,362
Utility Franchise	198,131
TOTAL	<u>\$566,756</u>

#### Southern California Gas:

Utility Franchise	\$529,642
TOTAL	<u>\$529,642</u>

#### Other Pipeline Franchises:

Pacific Lighting	\$ 12,540
Standard Gas	\$ 108
TOTAL	<u>\$ 12,648</u>

Total revenues to the City from these facilities is \$1,126,064 for 1979-80.

Pipeline and utility franchise tax rates are set by contracts between the City and the various companies. The major factors that affect pipeline rates are size and length of pipe, and the yearly flow through the pipe. Utility rates are based on gross sales of the product carried by the franchise (e.g. gas, electricity).

















