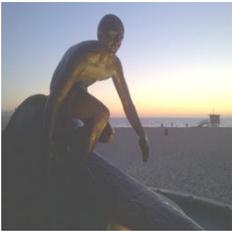


CITY OF HERMOSA BEACH

DEVELOPMENT AGREEMENT SUPPLEMENT TO THE OIL DRILLING & RECOVERY COST BENEFIT ANALYSIS



FINAL
JANUARY 2015



Table of Contents

| | | |
|-----|---|----|
| 1.0 | Executive Summary..... | 1 |
| 2.0 | Background..... | 3 |
| 3.0 | Public Benefits Provided in DA..... | 5 |
| 3.1 | Accelerated Uplands Royalty Payments (~Years 1-5)..... | 5 |
| 3.2 | Bonus Payments to Ensure \$1,000,000 Minimum Royalty (~Years 4-13)..... | 5 |
| 3.3 | Remediation of City Maintenance Yard..... | 6 |
| 3.4 | Relocation of City Maintenance Yard..... | 6 |
| 3.5 | Payment to City to Fund Community Improvements..... | 7 |
| 3.6 | Hermosa Beach Property Fund..... | 7 |
| 3.7 | Cumulative Impact on City Costs..... | 7 |
| 4.0 | Supplemental Exhibits..... | 9 |
| 5.0 | Oil Price Sensitivity..... | 21 |
| 6.0 | School Revenues..... | 24 |
| 6.1 | School District Revenues..... | 24 |
| 6.2 | Education Foundation Revenues..... | 25 |
| 7.0 | Conclusion..... | 26 |

The analyses, projections, assumptions, rates of return, and any examples presented herein are for illustrative purposes and are not a guarantee of actual and/or future results. Project pro forma and tax analyses are projections only. Actual results may differ materially from those expressed in this analysis.

Index of Tables & Figures

| | |
|---|----|
| Table 23-A: Summary of Direct City Costs (without DA)..... | 8 |
| Table 23-B: Summary of Direct City Costs (DA Terms)..... | 8 |
| Figure 1-A: Estimated Gross City Revenues, Expenses & Net Revenues (\$95/BBL, without DA, \$2014)..... | 10 |
| Figure 1-B: Estimated Gross City Revenues, Expenses & Net Revenues (\$95/BBL, DA Terms, \$2014)..... | 10 |
| Figure 1-C: Estimated Gross City Revenues, Expenses & Net Revenues (\$40/BBL, without DA, \$2014)..... | 11 |
| Figure 1-D: Estimated Gross City Revenues, Expenses & Net Revenues (\$40/BBL, DA Terms, \$2014)..... | 11 |
| Figure 1-E: Estimated Gross City Revenues, Expenses & Net Revenues (\$120/BBL, without DA, \$2014)..... | 12 |
| Figure 1-F: Estimated Gross City Revenues, Expenses & Net Revenues (\$120/BBL, DA Terms, \$2014)..... | 12 |
| Figure 16-A: Flowchart of City Royalty Calculations (With DA Terms)..... | 13 |
| Figure 17-A: Calculation of City Share of Oil & Gas Production (without DA & with DA Terms)..... | 14 |
| Figure 43-A: Summary of Net Projected Revenues with Project (\$95/BBL, without DA, \$2014)..... | 15 |
| Figure 43-B: Summary of Net Projected Revenues with Project (\$95/BBL, DA Terms, \$2014)..... | 16 |
| Figure 43-C: Summary of Net Projected Revenues with Project (\$40/BBL, without DA, \$2014)..... | 17 |
| Figure 43-D: Summary of Net Projected Revenues with Project (\$40/BBL, DA Terms, \$2014)..... | 18 |
| Figure 43-E: Summary of Net Projected Revenues with Project (\$120/BBL, without DA, \$2014)..... | 19 |
| Figure 43-F: Summary of Net Projected Revenues with Project (\$120/BBL, DA Terms, \$2014)..... | 20 |
| Figure 100: Estimated Gross and Net Projected City Revenues – Range of Oil Prices (without DA, \$2014)..... | 22 |
| Figure 101: Estimated Gross and Net Projected City Revenues – Range of Oil Prices (DA Terms, \$2014)..... | 23 |
| Figure 102: Estimated Net School District Revenues (in millions of \$2014, not impacted by DA Terms)..... | 24 |
| Figure 103: Estimated Net School District Revenues (in millions of \$2014, no change under DA Terms)..... | 25 |

Notice Regarding This Development Agreement Supplement to the CBA

This Development Agreement Supplement (“DA Supplement”) to the Cost Benefit Analysis (“CBA”) has been prepared by Kosmont Companies and oil and gas industry sub-consultant CGEOIL, LLC for the City of Hermosa Beach. This document was prepared to evaluate potential economic benefits that may accrue to the City of Hermosa Beach under the Development Agreement that may be entered into by and between the City of Hermosa Beach and the Project Applicant should the proposed Project be approved under Measure O.

This DA Supplement does not contain a comprehensive evaluation of the proposed Project, but rather only provides updates to analysis and estimates in the CBA pursuant to the terms of the Development Agreement, and current oil prices. Readers are encouraged to review the CBA released and accepted by the Hermosa Beach City Council in September of 2014, prior to the review of this document.

For an abundance of clarity, as stated in the CBA, the Authors neither support nor oppose the proposed Project. In the Authors' opinion, this DA Supplement and the CBA report present a neutral and unbiased perspective of the potential costs and benefits of the proposed Project to the City.

The CBA Team is not a law firm and does not provide legal counsel. The interpretation of the Development Agreement by the CBA Team should not be considered legal advice and/or conclusions of law.

For reference, as of the circulation of this document, the final CBA was available at: <http://www.hermosabch.org/modules/showdocument.aspx?documentid=4684>

Additionally, the DA was available at: <http://www.hermosabch.org/modules/showdocument.aspx?documentid=5054>

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|--|
| The analyses, projections, assumptions, rates of return, and any examples presented herein are for illustrative purposes and are not a guarantee of actual and/or future results. Project pro forma and tax analyses are projections only. Actual results may differ materially from those expressed in this analysis. |
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1.0 Executive Summary

This Development Agreement Supplement to the Cost Benefit Analysis provides follow-on analysis of the potential costs and benefits to the City of Hermosa Beach of the oil drilling and recovery project (“Project”) proposed by E&B Natural Resources Management Corporation (“Applicant”). The analysis in this supplement evaluates provisions of a proposed Development Agreement (“DA”) negotiated between the City and Applicant after the final Cost Benefit Analysis (“CBA”) was accepted by the City. The Development Agreement would be entered into should the voters of Hermosa Beach approve the proposed Project. A discussion of estimated City revenues and expenses should voters not approve the proposed Project is provided in the CBA.

As discussed in the CBA, if the Project were approved the City would be entitled to royalty revenues from oil and gas produced under the Project. Based on production estimates completed as part of the CBA, an assumed oil price of \$95 per barrel and excluding the terms of the DA, the Authors estimated that over the 35 year life of the Project the City would realize net revenues of approximately \$118 to \$270 million (\$2014). Of this total, approximately \$25 to \$77 million (net, 21 - 29%) was estimated to accrue to the City’s Uplands Fund, which is part of the City’s General Fund, and the balance accruing to the City’s Tideland Fund. Utilizing production estimates from the Applicant rather than those from the CBA, the Authors estimated that the City would realize net revenues of approximately \$450 million (\$2014), of which it was estimated that \$139 million (net, 31%) would accrue to the City’s General Fund.

As evaluated herein, under the proposed DA, and based on the same assumed oil price of \$95 per barrel, the Authors estimate that over the 35 year life of the proposed Project the City would realize net revenues of approximately \$138 to \$301 million (\$2014). Of this total, approximately \$46 to \$109 million (net, 33 - 36%) is estimated to accrue to the City’s General Fund, and the balance to the City’s Tideland Fund. Utilizing production estimates from the Applicant rather than those from the CBA, the Authors estimate that the City would realize net revenues of approximately \$494 million (\$2014), of which it is estimated that \$184 million (net, 37%) would accrue to the City’s General Fund. Thus, the various public benefit provisions of the DA notably increase the estimated revenues that would be expected to accrue to the City under the proposed Project, and also serve to provide a greater share of overall revenues to the Uplands fund.

Subsequent to the City’s acceptance of the CBA, and prior to the drafting of this DA Supplement the price of oil dropped substantially from roughly \$90 to \$100 per barrel of California Midway Sunset crude to just above \$40 per barrel (\$41.77 posted by Chevron as of January 21, 2015). Given the City’s royalty structures, the figures estimated above could decrease substantially should current pricing be indicative of a long term trend. To assist the reader in evaluating the potential magnitude of impacts to City revenues assuming a variety of oil prices, figures illustrating City revenues under oil prices ranging from \$40 to 120 per barrel are provided herein.

With respect to potential revenues for the Hermosa Beach City School District, based on production estimates completed as part of the CBA and based on oil pricing of \$95 per barrel, the Authors estimated that the School District would receive net revenues of approximately \$1.2 to \$2.2 million (\$2014) over the life of the Project, or, assuming the production estimates from the Applicant, \$3.8 million (\$2014). These estimates would not change under the terms of the DA, but would change should current oil prices be representative of a long term trend. Estimates of School District revenues assuming oil prices ranging from \$40 to \$120 per barrel are also provided herein.

Further, under the ballot language and ordinance for the Project, the Applicant has stated that it has assigned a 1% overriding royalty to the Hermosa Beach Education Foundation. Based on an oil price of \$95 per barrel, the Authors estimate that the Education Foundation would receive net revenues of approximately \$10.5 to \$21.4 million (\$2014) over the life of the Project, or, assuming the production estimates from the Applicant, \$34.3 million (\$2014). Again however, these estimates would change should current oil prices be representative of a long term trend. Estimates of Education Foundation revenues assuming oil prices ranging from \$40 to \$120 per barrel are included in this supplement.

2.0 Background

As previously introduced, the City of Hermosa Beach is in the process of evaluating a proposal by the Applicant to develop the Project within the City. As part of the City's evaluation, the City retained Kosmont Companies ("Kosmont") and sub-consultant CGEOIL, LLC (collectively "Kosmont Team", or "Authors") to prepare the Cost Benefit Analysis ("CBA") to evaluate the potential financial costs and benefits to the City of the proposed Project. Subsequent to the release of the final CBA in September of 2014, the City and Applicant completed negotiations on a proposed Development Agreement ("DA"). This supplemental report to the CBA ("DA Supplement") considers terms of the DA that pertain to the analysis in the CBA, and provides supplemental analysis as appropriate. Additionally, this DA supplement includes a discussion and analysis of estimated gross and net City revenues given changes in the price of oil.

Readers are encouraged to review the final CBA released in September of 2014 prior to the review of this document. The City has also prepared and made available its summary of the terms and provisions of the DA. Additional information pertinent to the review of this DA Supplement follows below.

Production Estimates

This DA Supplement estimates City and Hermosa Beach Education Foundation ("Education Foundation") revenues based on the oil and gas production estimates evaluated in the CBA (please see Section 5.0 beginning on page 20 of the CBA). These estimates are classified as "CBA Low" (~10.9 million barrels), "CBA Expected" (~17.1 million barrels), "CBA High" (~22.2 million barrels), and "Applicant" (~35.6 million barrels) and represent different estimates of oil (and gas) that might be produced over the life of the Project should it be approved.

Oil Price Points

Revenue estimates in the CBA were calculated assuming a fixed price of \$95 per barrel (\$2014, plus inflation in future years) of California Midway Sunset ("CMS"). This assumed price was in line with oil prices at the time of the drafting of the CBA (please see Section 6.0 beginning on page 32 of the CBA). However, subsequent to the publication of the CBA, and as of the drafting of this DA Supplement, the price of oil has dramatically decreased. As of January 21, 2015 Chevron's posted price for CMS was \$41.77 per barrel. Given the currently significant difference in oil pricing, this DA Supplement includes analysis of City revenues given various price points. The three primary price scenarios evaluated herein are a low assumed price of \$40 per barrel, the CBA assumed price of \$95 per barrel, and a high assumed price of \$120 per barrel. Estimated revenues under oil price increments between \$40 and \$120 per barrel are also provided in Figure 100 and Figure 101 on pages 22 and 23.

Note Regarding Oil Prices Evaluated: The range of oil prices evaluated herein (\$40 to \$120 per barrel of CMS) are for reference only, and do not represent predictions of future

oil prices. It is the Authors opinion that should oil prices remain below approximately \$60 per barrel of CMS over the long term, there may not be sufficient revenues to justify all of the substantial costs of Project infrastructure (i.e. production wells) required to realize the potential production volumes estimated in the CBA (i.e. CBA Low, CBA Expected, and CBA High). Further, the Authors expect that the Applicant may not proceed with the Project should oil prices remain at their current levels (\$2014) over the life of the Oil Lease. However, it is the Authors opinion that it is unlikely that oil prices will remain at their current levels for an extended period of time, and likely that prices will return to levels above \$60 per barrel in the future, though as discussed in Section 6.0 of the CBA (beginning on page 32 of the CBA) accurately predicting long term oil pricing is elusive.

Rounding Errors

In both the CBA and this document figures are often rounded to differing levels of significant digits for ease of reading. When rounded sums are added they may not equal the rounded sum of the unrounded values. Calculations herein are based on unrounded values from the same data sets, but results of calculations are often presented as rounded values that may not precisely match based on differing levels of rounding (i.e. rounded to the nearest thousand versus to the nearest ten-thousand).

Present Values

Figures in this DA Supplement are presented on a present value basis (please see Section 2.5 beginning on page 7 of the CBA) in 2014 dollars (“\$2014”) unless otherwise noted.

Numbering of Tables & Figures

Many of the figures in this DA Supplement are duplicates and/or iterations of figures contained in the final CBA. Duplicates are provided for easy reference. Iterations are provided to illustrate the impact of DA terms on estimates, and/or additional analysis based on alternative assumptions on future oil prices. Where figures represent duplicates and/or iterations, the original figure number from the CBA is preserved, and a hyphen and alphabetical letter are added (i.e. Figure 1-A). New tables and figures that are not duplicates and/or iterations of CBA exhibits are denoted by a number at or above 100 (i.e. Figure 100).

3.0 Public Benefits Provided in DA

Should the Project be approved, and the proposed Development Agreement goes into effect, the Applicant would provide a number of benefits to the City in addition to those provided for under the Oil Lease and Settlement Agreement. A discussion of relevant DA provisions follows in this Section. Further, analysis of the cumulative impact of these provisions on City revenue calculations is provided in Figures 1-A through 1-F and Figures 43-A through 43-F in Section 4.0.

3.1 Accelerated Uplands Royalty Payments (~Years 1-5)

Pursuant to Paragraph 1 of Exhibit C to the DA, generally, the Applicant will ensure that the City receives a minimum of \$1 million in Project related gross annual Uplands revenues for five years commencing upon the City's issuance to the Applicant of a permit for the first well. To the extent that annual Uplands revenues due to the City are less than \$1 million during the five year period, the Applicant shall pay the City (backfill) the difference between actual annual Uplands revenues and \$1 million. Any such payment by the Applicant shall be considered an accelerated Uplands royalty payment, and be repaid with future revenues earned after the five year period, subordinate to / net of the repayment of advances (discussed in Section 9.5 beginning on page 59 of the CBA). To the extent that future Uplands royalty revenues are not sufficient to repay the accelerated payments, such portion of accelerated payments would be forgiven.

Based on the scenarios evaluated herein, this provision is estimated to have a modest positive impact on the overall present value of the proposed Project to the City. While the provision certainly would provide the City revenue immediately upon issuance of a well permit, such funds would directly offset subsequent revenues until repaid. Based on the four production estimates and three oil price points evaluated herein, this provision represents a positive present value to the City of between approximately \$0 to \$220,000 (\$2014), with higher present values generally ascribed to lower oil prices and lower or intermittent production.

3.2 Bonus Payments to Ensure \$1,000,000 Minimum Royalty (~Years 4-13)

Pursuant to Paragraph 2 of Exhibit C to the DA, generally, the Applicant will ensure that the City receives a minimum of \$1 million in Project related gross annual revenues between the Tidelands and Uplands funds during roughly years four through 13 of the proposed Project. Under the Lease the City is currently entitled to receive a minimum of \$500,000 per year commencing the fourth year after completion of the first well (please see Section 7.5 beginning on page 48 of the CBA). This provision of the DA would effectively increase the minimum from \$500,000 to \$1 million per year, commencing four years from the completion of the first well through the 13th anniversary of the completion of the first well. Thus, under this provision of the DA, should actual combined City Tidelands and Uplands revenues be less than \$1 million during the applicable years, the Applicant will pay to the City the difference between \$1 million

and actual revenues. It is the Authors conclusion that any such minimum lease or bonus payment would effectively go to the Uplands and not be subject to Tidelands restrictions.

Based on the scenarios evaluated herein, this provision is estimated to have no impact on the overall present value of the proposed Project to the City. While the provision certainly would provide the City revenues if there were no or limited oil production, none of the four production estimates and three oil price points evaluated herein resulted in a payment being made to the City under this provision.

3.3 Remediation of City Maintenance Yard

Pursuant to Paragraph 3 of Exhibit C to the DA, generally, should the Applicant proceed with Phase 3 of the proposed Project (please see Section 2.6 beginning on page 9 of the CBA), then the Applicant would pay for the environmental remediation of the existing City maintenance yard (“Project Site”). The estimated cost of remediating the Project Site is approximately \$3.8 million (\$2014). Without this provision in the DA, if the proposed Project were approved, substantially all of this cost would have been borne by the City. As such this provision of the DA provides a benefit to the City of approximately \$3.8 million (\$2014) before potential financing considerations.

3.4 Relocation of City Maintenance Yard

Pursuant to Paragraph 4 of Exhibit C to the DA, generally, upon issuance by the City to the Applicant of a drilling permit for the first well, the City shall not be required to repay the \$3.5 million settlement payment required under Section 4.6.b of the Settlement Agreement. *Note: The DA reads “Section 4.6.b of the Lease” though the Authors conclude this was intended to refer to the Settlement Agreement.* In addition, the DA provides that should the Applicant proceed with Phase 3 of the proposed Project then the Applicant shall provide an advance of \$6.5 million to the City to fund the permanent relocation of the City maintenance yard. *Note: The Authors interpret this provision and advance to be an increase in the “Advance” provided for under Section 13.d of the Oil Lease from \$500,000 to \$6.5 million.*

Based on the four production estimates and three oil price points evaluated herein, the forgiveness of the \$3.5 million settlement payment represents a present value to the City of approximately \$2.9 to \$3.1 million (\$2014). The estimated present value is less than \$3.5 million as repayment of the settlement payment is limited by maximum annual payments that serve to extend full repayment several years into the future, without interest, resulting in a lower present value.

With respect to the \$6.5 million advance, repayment provisions are defined under the terms of the Oil Lease (please see Section 9.5 beginning on page 59 of the CBA), and notably, include a simple interest formula rather than a compounding formula. The effect on projected City cashflows is a reduction in the amount of money that may need to be externally financed, as well as a reduction in estimated financing costs. Thus, while the \$6.5 million advance needs to be repaid, borrowing the money as an advance has a lower present value than the alternatives

evaluated. Based on the four production estimates and three oil price points evaluated herein, this provision represents a positive present value to the City of between approximately \$2.4 to \$2.6 million (\$2014), with higher values generally ascribed to higher oil prices and production estimates (and faster repayment).

3.5 Payment to City to Fund Community Improvements

Pursuant to Paragraph 5 of Exhibit C to the DA, generally, the Applicant will pay to the City an additional amount equal to 1% of gross oil and gas production revenues. Further, the Applicant will provide an initial accelerated payment of \$1 million upon the City's issuance of a drilling permit for the first well. It is the Authors understanding that this \$1 million payment shall be an offset to / repaid with future revenues. Based on the four production estimates and three oil price points evaluated herein, this provision represents a positive present value to the City of between approximately \$4.6 to \$43.3 million (\$2014), with higher values ascribed to higher oil prices and production estimates.

3.6 Hermosa Beach Property Fund

Pursuant to Paragraph 6 of Exhibit C to the DA, generally, the Applicant shall set up a fund to compensate owners of property within 600 feet of the proposed Project in the event that they sell their property and the sales price is impaired due to the Project. The reader is encouraged to review Paragraph 6 of Exhibit C for further details of this provision. The focus of the CBA and this DA Supplement is the quantification of potential Project costs and benefits primarily from the perspective of the City as a municipal organization, and not individual property owners. As such, the Authors did not attempt to quantify this as an offset to potential costs.

3.7 Cumulative Impact on City Costs

In Section 9.10 of the CBA (page 69) a summary of estimated direct City Costs are provided in Table 23. The provisions of the DA discussed above serve to reduce the total estimated net direct City costs provided therein from approximately \$26.7 to \$19.4 million (\$2014, before financing considerations). A duplication of Table 23 from the CBA is provided below in Table 23-A, and the same summary, updated to reflect the terms of the DA also follows in Table 23-B.

Table 23-A: Summary of Direct City Costs **(without DA)**

| | \$2014 | Offset | Net Cost | Notes |
|-------------------------------------|----------------------|---------------|----------------------|---------------------------------------|
| Settlement Payment | \$ 3,500,000 | none | \$ 3,500,000 | Paid through royalty revenues |
| Temporary Maintenance Yard | 3,050,000 | none | 3,050,000 | |
| Permanent Maintenance Yard | 9,990,000 | none | 9,990,000 | Superior to existing facility |
| Loss of storage Site Revenue | 6,390,000 | none | 6,390,000 | Average of estimated value range |
| Maintenance Yard Remediation | 3,810,000 | \$50,000 | 3,760,000 | \$50k to be paid by Applicant |
| Emergency Trust Fund | 2,000,000 | 100% | - | Funds are returned if not used |
| Fire Service | 16,490,000 | 100% | - | Cost required to be paid by Applicant |
| Ongoing Project Monitoring | 11,900,000 | 100% | - | Recouped through Well Permit Fee |
| | <u>\$ 57,130,000</u> | | <u>\$ 26,690,000</u> | |

Table 23-B: Summary of Direct City Costs **(DA Terms)**

| | \$2014 | Offset | Net Cost | Notes |
|-------------------------------------|----------------------|---------------|----------------------|---|
| Settlement Payment | \$ 3,500,000 | 100% | \$ - | Forgiven upon issuance of drilling permit |
| Temporary Maintenance Yard | 3,050,000 | none | 3,050,000 | |
| Permanent Maintenance Yard | 9,990,000 | none | 9,990,000 | Superior to existing facility |
| Loss of storage Site Revenue | 6,390,000 | none | 6,390,000 | Average of estimated value range |
| Maintenance Yard Remediation | 3,810,000 | 100% | - | Cost paid by Applicant |
| Emergency Trust Fund | 2,000,000 | 100% | - | Funds are returned if not used |
| Fire Service | 16,490,000 | 100% | - | Cost required to be paid by Applicant |
| Ongoing Project Monitoring | 11,900,000 | 100% | - | Recouped through Well Permit Fee |
| | <u>\$ 57,130,000</u> | | <u>\$ 19,430,000</u> | |

Note: These costs in 23-A and 23-B above do not include the potential cost of financing, or the use of advances pursuant to the Oil Lease. These additional considerations are evaluated and summarized in Figures 43-A through 43-F in Section 4.0 below.

4.0 Supplemental Exhibits

In this Section, exhibits from the CBA, and iterations thereof based on different assumptions are provided as follows:

- Iterations of Figure 1 and Figure 43 from the CBA illustrating estimated costs and revenues (i) with or without inclusion of the terms of the proposed DA, and (ii) assuming an oil price of \$95 per barrel (“BBL”), \$40 per barrel, and \$120 per barrel.
- Iterations of Figure 16 and Figure 17 from the CBA illustrating modifications only in consideration of the terms in the proposed DA.

Figures 1, 16, 17, and 43 from the CBA and iterations thereof follow below.

Figure 1-A: Estimated Gross City Revenues, Expenses & Net Revenues (\$95/BBL, without DA, \$2014)

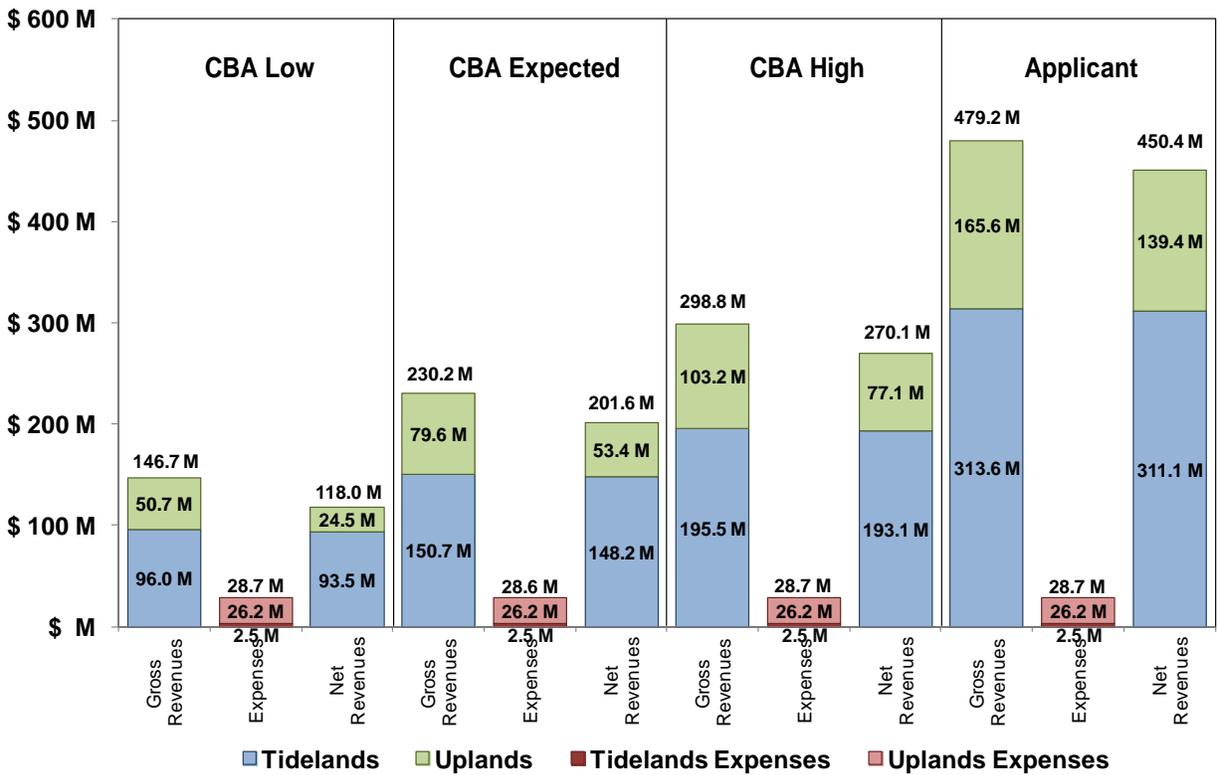


Figure 1-B: Estimated Gross City Revenues, Expenses & Net Revenues (\$95/BBL, DA Terms, \$2014)

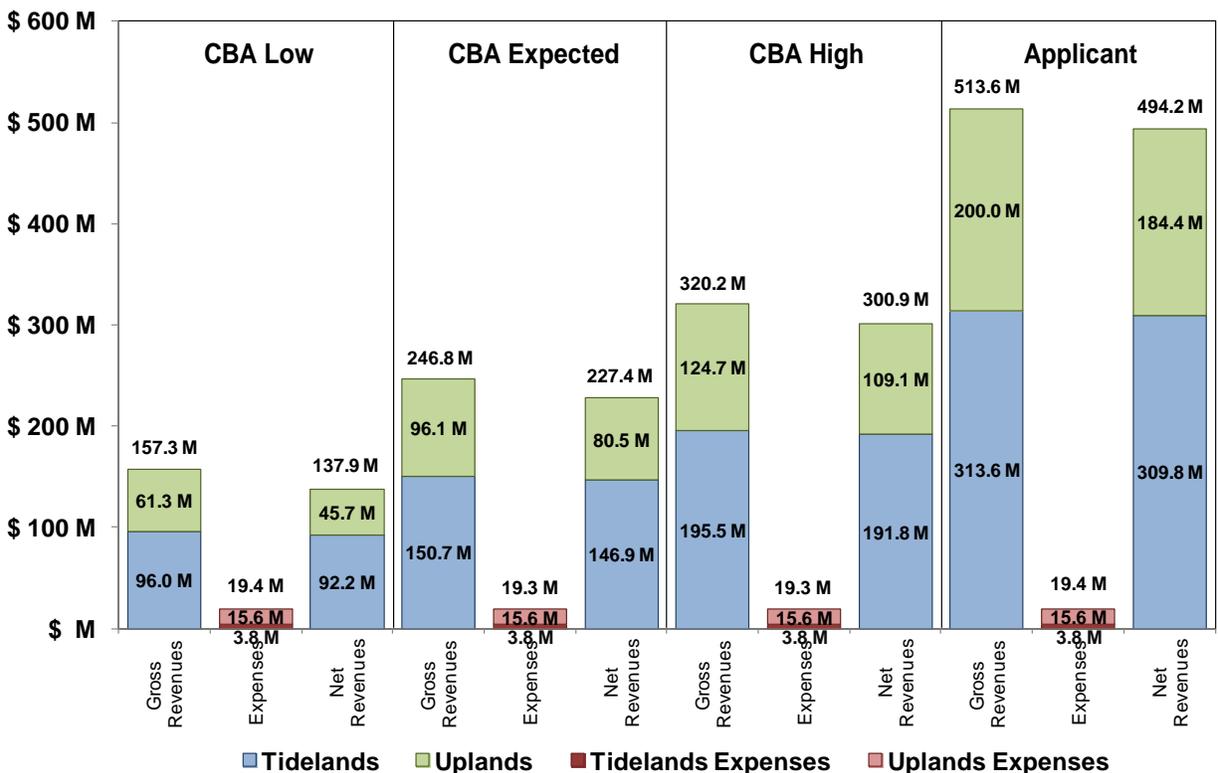


Figure 1-C: Estimated Gross City Revenues, Expenses & Net Revenues (\$40/BBL, without DA, \$2014)

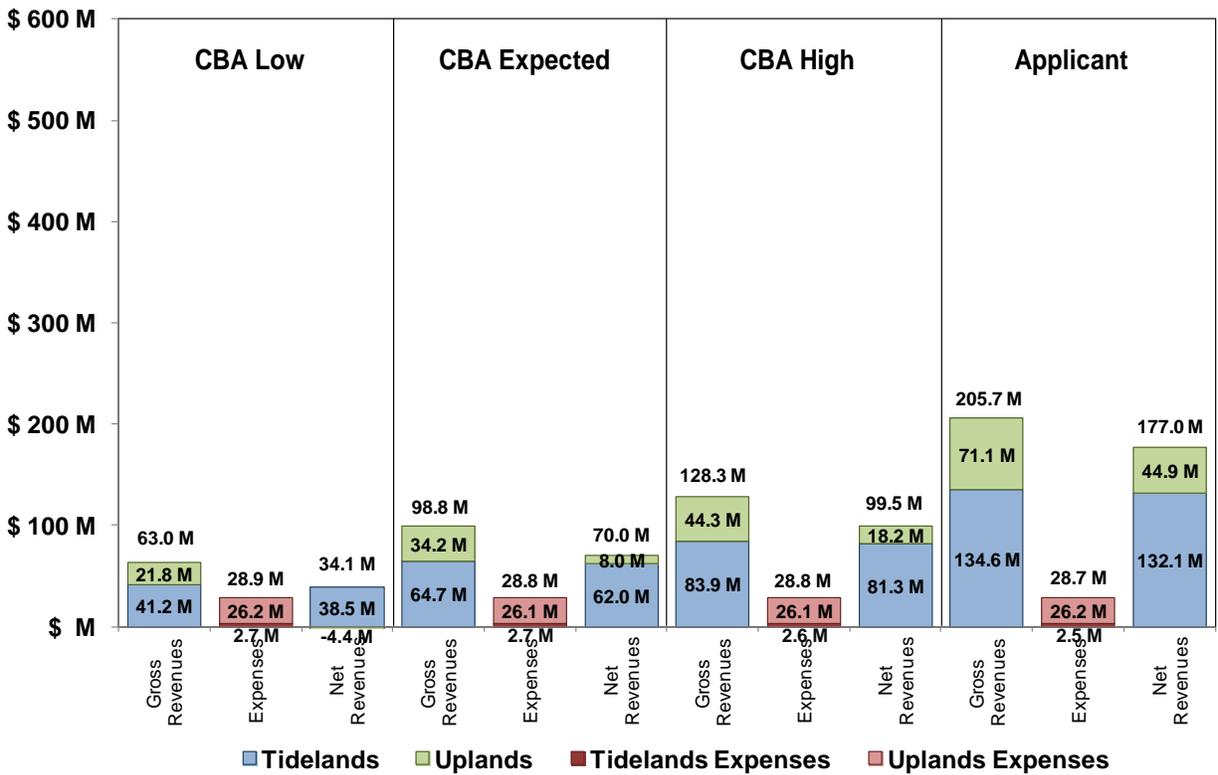
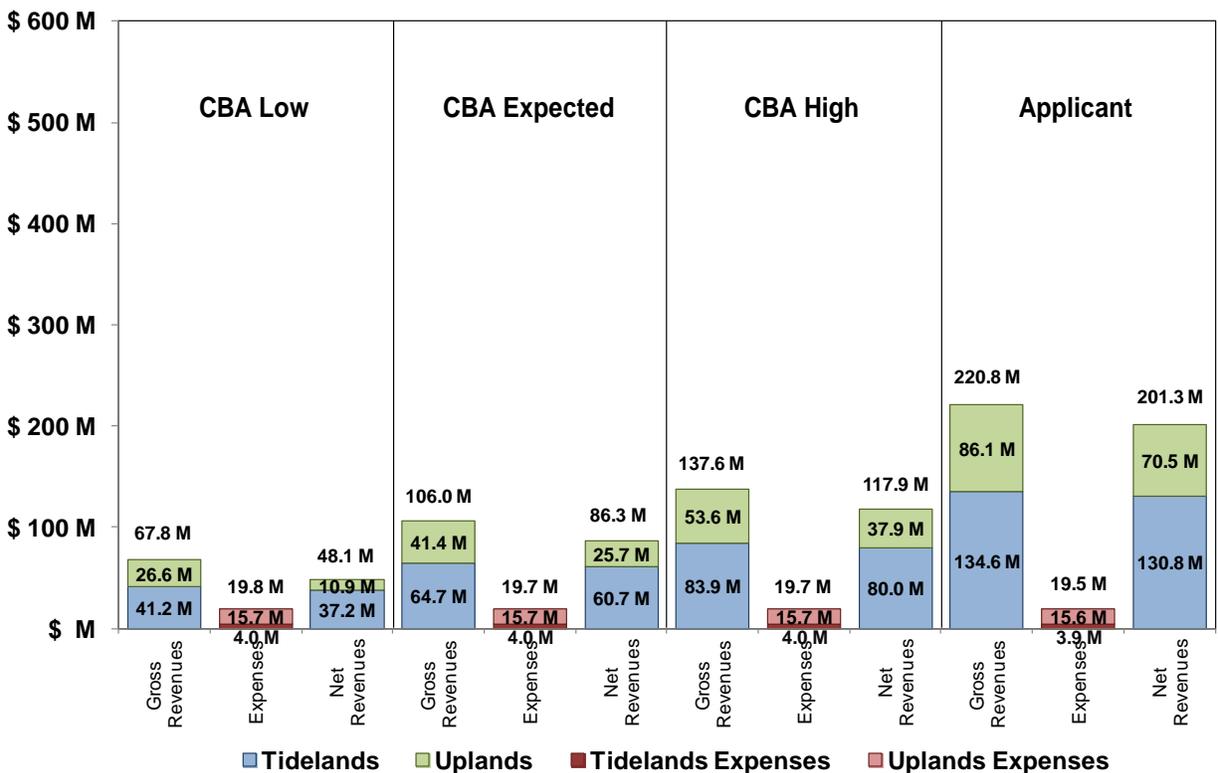


Figure 1-D: Estimated Gross City Revenues, Expenses & Net Revenues (\$40/BBL, DA Terms, \$2014)



Note to Figures 1-C and 1-D: Please see the Note Regarding Oil Prices Evaluated beginning on page 3.

Figure 1-E: Estimated Gross City Revenues, Expenses & Net Revenues (\$120/BBL, without DA, \$2014)

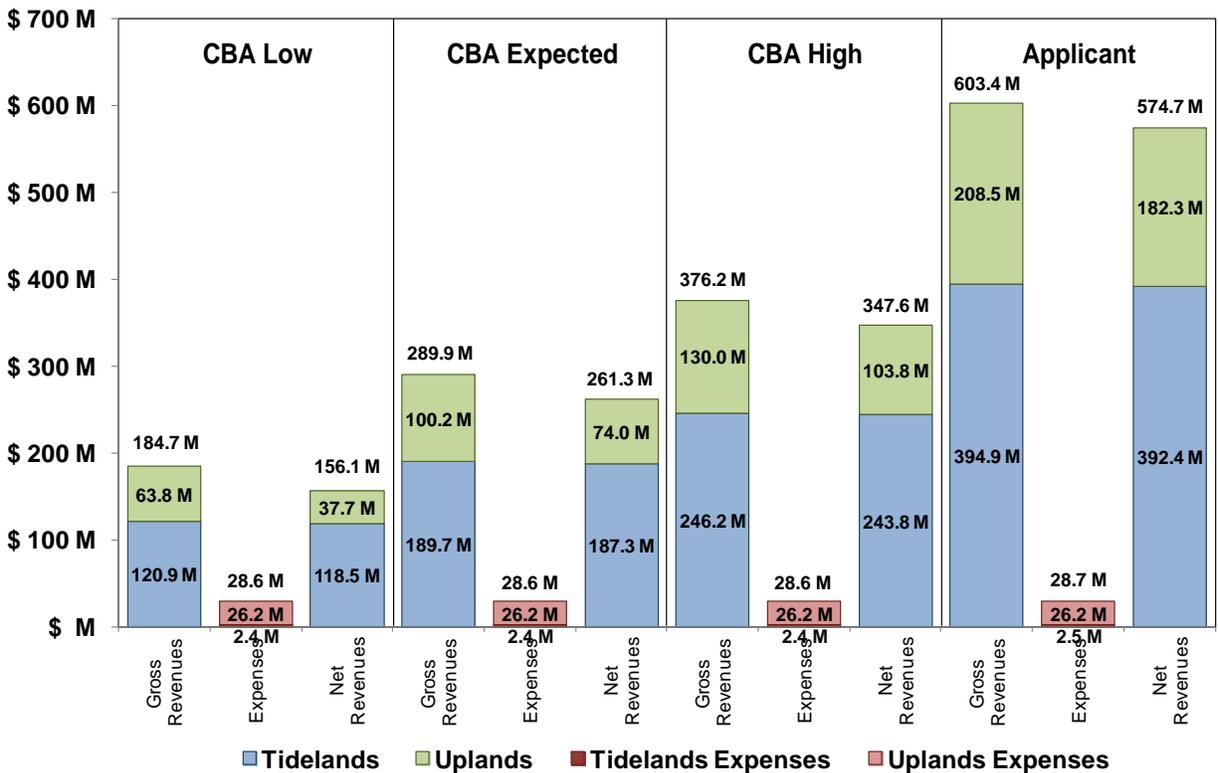
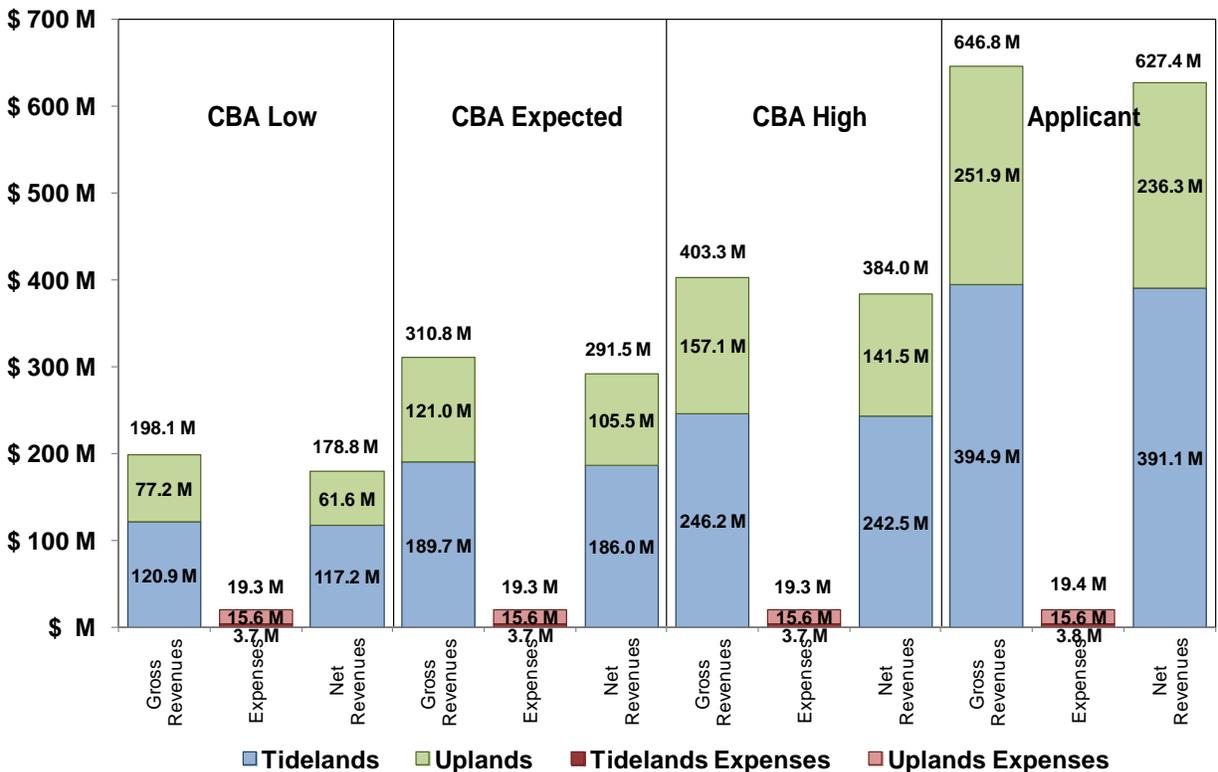
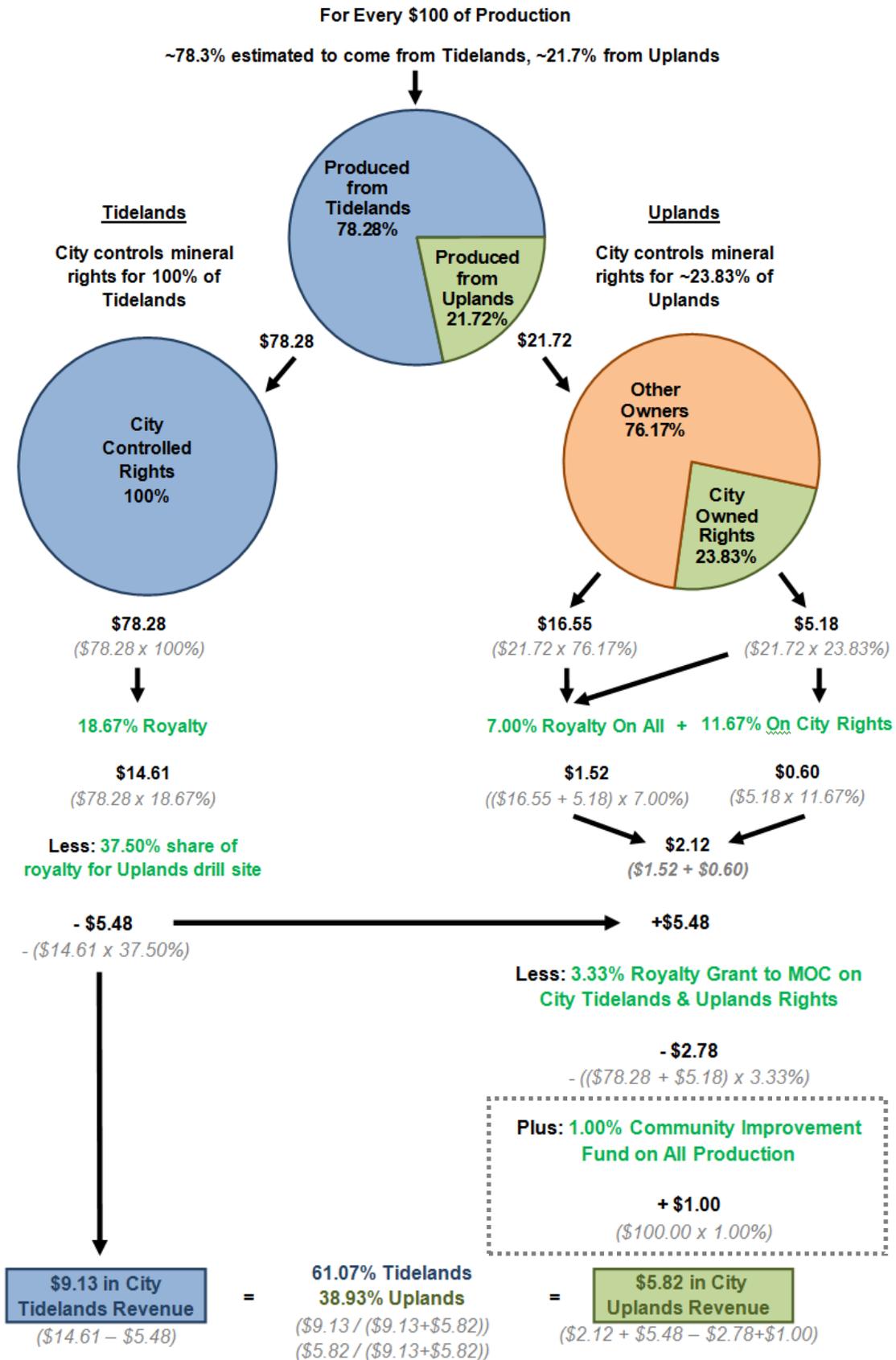


Figure 1-F: Estimated Gross City Revenues, Expenses & Net Revenues (\$120/BBL, DA Terms, \$2014)



Note to Figures 1-E and 1-F: Please see the Note Regarding Oil Prices Evaluated beginning on page 3.

Figure 16-A: Flowchart of City Royalty Calculations (With DA Terms)



Note to Figure 16-A: Changes to this figure to reflect terms in the DA are identified by the gray dotted box

(without DA)

| City Revenue Calculations | | | For every \$100 Produced | For Every \$100 in City Revenues |
|---|---|---|--|--|
| For Every \$100 Produced | | | | |
| Produced from Tidelands | 78.28% | | Produced in Tidelands (\$100 x 78.28%) | \$ 78.28 |
| Produced from Uplands | 21.72% | | Produced in Uplands (\$100 x 21.72%) | 21.72 |
| City - Tidelands | | | | |
| City Tidelands Royalty | 18.67% of all Oil & Gas Produced in Tidelands | (\$100 x 78.28% x 18.67%) | \$ 14.61 | 104.71 |
| Less: Drill Site Lease Payment to Uplands | -37.50% of City Tidelands Royalty | -(\$100 x 78.28% x 18.67% x 37.50%) | (5.48) | (39.27) |
| Subtotal City Tidelands | | | \$ 9.13 | \$ 65.44 |
| City - Uplands | | | | |
| City Share / City Land Ownership | 23.83% | | | |
| City Uplands Royalty | 11.67% of City Share of Oil & Gas Produced in Uplands | (\$100 x 21.72% x 23.83% x 11.67%) | 0.60 | 4.33 |
| Drill Site Lease - Uplands Payment | 7.00% of all Oil & Gas Produced in Uplands | (\$100 x 21.72% x 7.00%) | 1.52 | 10.90 |
| Drill Site Lease - Tidelands Payment | 37.50% of City Tidelands Royalty | (\$100 x 78.28% x 18.67% x 37.50%) | 5.48 | 39.27 |
| Less: Royalty to Macpherson Oil Company | -3.33% of City Share of Oil & Gas Produced | -(\$100 x 78.28% x 3.33%) - (\$100 x 21.72% x 23.83% x 3.33%) | (2.78) | (19.93) |
| Subtotal City Uplands | | | \$ 4.82 | \$ 34.56 |
| | | | Total City Revenue | \$ 13.95 |
| | | | | \$ 100.00 |

(DA Terms)

| City Revenue Calculations | | | For every \$100 Produced | For Every \$100 in City Revenues |
|---|---|---|--|--|
| For Every \$100 Produced | | | | |
| Produced from Tidelands | 78.28% | | Produced in Tidelands (\$100 x 78.28%) | \$ 78.28 |
| Produced from Uplands | 21.72% | | Produced in Uplands (\$100 x 21.72%) | 21.72 |
| City - Tidelands | | | | |
| City Tidelands Royalty | 18.67% of all Oil & Gas Produced in Tidelands | (\$100 x 78.28% x 18.67%) | \$ 14.61 | 97.71 |
| Less: Drill Site Lease Payment to Uplands | -37.50% of City Tidelands Royalty | -(\$100 x 78.28% x 18.67% x 37.50%) | (5.48) | (36.64) |
| Subtotal City Tidelands | | | \$ 9.13 | \$ 61.07 |
| City - Uplands | | | | |
| City Share / City Land Ownership | 23.83% | | | |
| City Uplands Royalty | 11.67% of City Share of Oil & Gas Produced in Uplands | (\$100 x 21.72% x 23.83% x 11.67%) | 0.60 | 4.04 |
| Drill Site Lease - Uplands Payment | 7.00% of all Oil & Gas Produced in Uplands | (\$100 x 21.72% x 7.00%) | 1.52 | 10.17 |
| Drill Site Lease - Tidelands Payment | 37.50% of City Tidelands Royalty | (\$100 x 78.28% x 18.67% x 37.50%) | 5.48 | 36.64 |
| Less: Royalty to Macpherson Oil Company | -3.33% of City Share of Oil & Gas Produced | -(\$100 x 78.28% x 3.33%) - (\$100 x 21.72% x 23.83% x 3.33%) | (2.78) | (18.60) |
| 1% Community Improvement Fund | 1.00% of all Oil & Gas Production | (\$100 x 1.00%) | 1.00 | 6.69 |
| Subtotal City Uplands | | | \$ 5.82 | \$ 38.93 |
| | | | Total City Revenue | \$ 14.95 |
| | | | | \$ 100.00 |

Figure 17-A: Calculation of City Share of Oil & Gas Production (without DA & with DA Terms)

Figure 43-A: Summary of Net Projected Revenues with Project (**\$95/BBL, without DA, \$2014**)

| | Low <u>CBA Low</u> | CBA Expected | CBA High | High <u>Applicant</u> |
|--|------------------------|------------------------|------------------------|--------------------------|
| Tidelands Royalties | | | | |
| Gross Tidelands Oil & Gas Revenues | \$ 96,000,000 | \$ 150,650,000 | \$ 195,510,000 | \$ 313,570,000 |
| Less: Settlement Agreement Payment | - | - | - | - |
| Less: Repayment of Advances (70% of Repayment) | (3,030,000) | (3,030,000) | (3,030,000) | (3,100,000) |
| Less: Allocation for Emergency Trust (70% of Funding) | 540,000 | 560,000 | 570,000 | 600,000 |
| Net Tidelands Revenues | \$ 93,520,000 | \$ 148,190,000 | \$ 193,050,000 | \$ 311,070,000 |
| Uplands Royalties | | | | |
| Gross Uplands Oil & Gas Revenues | \$ 50,690,000 | \$ 79,550,000 | \$ 103,240,000 | \$ 165,580,000 |
| Less: Settlement Agreement Payment | (3,100,000) | (3,100,000) | (3,100,000) | (3,120,000) |
| Less: Repayment of Advances (30% of Repayment) | (1,300,000) | (1,300,000) | (1,300,000) | (1,330,000) |
| Less: Allocation for Emergency Trust (30% of Funding) | 230,000 | 240,000 | 240,000 | 260,000 |
| Net Uplands Royalty Revenues | \$ 46,530,000 | \$ 75,390,000 | \$ 99,080,000 | \$ 161,390,000 |
| Other Revenues & Costs (Considered Uplands) | | | | |
| Accelerated Uplands Royalty (Pursuant to DA) | \$ - | \$ - | \$ - | \$ - |
| Bonus Payments (Pursuant to DA) | - | - | - | - |
| 1% Community Improvement Fund (Pursuant to DA) | - | - | - | - |
| Use of City Reserve for Temporary Relocation | (2,960,000) | (2,960,000) | (2,960,000) | (2,960,000) |
| Use of City Reserve for Project Site Remediation | (50,000) | (50,000) | (50,000) | (50,000) |
| Use of City Reserve for Permanent Relocation | (2,660,000) | (2,660,000) | (2,660,000) | (2,660,000) |
| Debt Service For Permanent Relocation (Approximate) | (9,980,000) | (9,980,000) | (9,980,000) | (9,980,000) |
| Loss of Storage Site Revenues | (6,390,000) | (6,390,000) | (6,390,000) | (6,390,000) |
| Total Other Revenues & Costs | \$ (22,030,000) | \$ (22,030,000) | \$ (22,030,000) | \$ (22,030,000) |
| Net Uplands Revenues After Other Costs | \$ 24,500,000 | \$ 53,370,000 | \$ 77,050,000 | \$ 139,360,000 |
| Net Tidelands & Uplands Revenues | \$ 118,020,000 | \$ 201,550,000 | \$ 270,100,000 | \$ 450,430,000 |

Figure 43-B: Summary of Net Projected Revenues with Project (\$95/BBL, DA Terms, \$2014)

| | Low <u>CBA Low</u> | CBA Expected | CBA High | High <u>Applicant</u> |
|--|-----------------------|-----------------------|-----------------------|--------------------------|
| Tidelands Royalties | | | | |
| Gross Tidelands Oil & Gas Revenues | \$ 96,000,000 | \$ 150,650,000 | \$ 195,510,000 | \$ 313,570,000 |
| Less: Settlement Agreement Payment | - | - | - | - |
| Less: Repayment of Advances (70% of Repayment) | (4,310,000) | (4,310,000) | (4,310,000) | (4,390,000) |
| Less: Allocation for Emergency Trust (70% of Funding) | 540,000 | 560,000 | 570,000 | 600,000 |
| Net Tidelands Revenues | \$ 92,230,000 | \$ 146,900,000 | \$ 191,760,000 | \$ 309,780,000 |
| Uplands Royalties | | | | |
| Gross Uplands Oil & Gas Revenues | \$ 50,690,000 | \$ 79,550,000 | \$ 103,240,000 | \$ 165,580,000 |
| Less: Settlement Agreement Payment | - | - | - | - |
| Less: Repayment of Advances (30% of Repayment) | (1,850,000) | (1,850,000) | (1,850,000) | (1,880,000) |
| Less: Allocation for Emergency Trust (30% of Funding) | 230,000 | 240,000 | 240,000 | 260,000 |
| Net Uplands Royalty Revenues | \$ 49,080,000 | \$ 77,940,000 | \$ 101,630,000 | \$ 163,960,000 |
| Other Revenues & Costs (Considered Uplands) | | | | |
| Accelerated Uplands Royalty (Pursuant to DA) | \$ 10,000 | \$ 10,000 | \$ 10,000 | \$ 30,000 |
| Bonus Payments (Pursuant to DA) | - | - | - | - |
| 1% Community Improvement Fund (Pursuant to DA) | 10,580,000 | 16,560,000 | 21,470,000 | 34,410,000 |
| Use of City Reserve for Temporary Relocation | (2,960,000) | (2,960,000) | (2,960,000) | (2,960,000) |
| Use of City Reserve for Project Site Remediation | - | - | - | - |
| Use of City Reserve for Permanent Relocation | (2,700,000) | (2,700,000) | (2,700,000) | (2,700,000) |
| Debt Service For Permanent Relocation (Approximate) | (1,940,000) | (1,940,000) | (1,940,000) | (1,940,000) |
| Loss of Storage Site Revenues | (6,390,000) | (6,390,000) | (6,390,000) | (6,390,000) |
| Total Other Revenues & Costs | \$ (3,400,000) | \$ 2,590,000 | \$ 7,500,000 | \$ 20,440,000 |
| Net Uplands Revenues After Other Costs | \$ 45,680,000 | \$ 80,530,000 | \$ 109,130,000 | \$ 184,400,000 |
| Net Tidelands & Uplands Revenues | \$ 137,910,000 | \$ 227,430,000 | \$ 300,890,000 | \$ 494,180,000 |

Figure 43-C: Summary of Net Projected Revenues with Project (**\$40/BBL, without DA, \$2014**)

| | Low <u>CBA Low</u> | CBA Expected | CBA High | High <u>Applicant</u> |
|--|------------------------|------------------------|------------------------|--------------------------|
| Tidelands Royalties | | | | |
| Gross Tidelands Oil & Gas Revenues | \$ 41,220,000 | \$ 64,680,000 | \$ 83,940,000 | \$ 134,630,000 |
| Less: Settlement Agreement Payment | - | - | - | - |
| Less: Repayment of Advances (70% of Repayment) | (3,100,000) | (3,090,000) | (3,090,000) | (3,100,000) |
| Less: Allocation for Emergency Trust (70% of Funding) | 390,000 | 430,000 | 460,000 | 590,000 |
| Net Tidelands Revenues | \$ 38,510,000 | \$ 62,020,000 | \$ 81,310,000 | \$ 132,110,000 |
| Uplands Royalties | | | | |
| Gross Uplands Oil & Gas Revenues | \$ 21,770,000 | \$ 34,160,000 | \$ 44,320,000 | \$ 71,090,000 |
| Less: Settlement Agreement Payment | (2,960,000) | (2,970,000) | (2,980,000) | (3,060,000) |
| Less: Repayment of Advances (30% of Repayment) | (1,330,000) | (1,330,000) | (1,330,000) | (1,330,000) |
| Less: Allocation for Emergency Trust (30% of Funding) | 170,000 | 180,000 | 200,000 | 250,000 |
| Net Uplands Royalty Revenues | \$ 17,640,000 | \$ 30,040,000 | \$ 40,220,000 | \$ 66,950,000 |
| Other Revenues & Costs (Considered Uplands) | | | | |
| Accelerated Uplands Royalty (Pursuant to DA) | \$ - | \$ - | \$ - | \$ - |
| Bonus Payments (Pursuant to DA) | - | - | - | - |
| 1% Community Improvement Fund (Pursuant to DA) | - | - | - | - |
| Use of City Reserve for Temporary Relocation | (2,960,000) | (2,960,000) | (2,960,000) | (2,960,000) |
| Use of City Reserve for Project Site Remediation | (50,000) | (50,000) | (50,000) | (50,000) |
| Use of City Reserve for Permanent Relocation | (2,660,000) | (2,660,000) | (2,660,000) | (2,660,000) |
| Debt Service For Permanent Relocation (Approximate) | (9,980,000) | (9,980,000) | (9,980,000) | (9,980,000) |
| Loss of Storage Site Revenues | (6,390,000) | (6,390,000) | (6,390,000) | (6,390,000) |
| Total Other Revenues & Costs | \$ (22,030,000) | \$ (22,030,000) | \$ (22,030,000) | \$ (22,030,000) |
| Net Uplands Revenues After Other Costs | \$ (4,390,000) | \$ 8,020,000 | \$ 18,190,000 | \$ 44,930,000 |
| Net Tidelands & Uplands Revenues | \$ 34,130,000 | \$ 70,030,000 | \$ 99,500,000 | \$ 177,040,000 |

Note to Figures 43-C: Please see the Note Regarding Oil Prices Evaluated beginning on page 3.

Figure 43-D: Summary of Net Projected Revenues with Project (**\$40/BBL, DA Terms, \$2014**)

| | Low <u>CBA Low</u> | CBA Expected | CBA High | High <u>Applicant</u> |
|--|-----------------------|-----------------------|-----------------------|--------------------------|
| Tidelands Royalties | | | | |
| Gross Tidelands Oil & Gas Revenues | \$ 41,220,000 | \$ 64,680,000 | \$ 83,940,000 | \$ 134,630,000 |
| Less: Settlement Agreement Payment | - | - | - | - |
| Less: Repayment of Advances (70% of Repayment) | (4,440,000) | (4,440,000) | (4,440,000) | (4,440,000) |
| Less: Allocation for Emergency Trust (70% of Funding) | 410,000 | 450,000 | 480,000 | 590,000 |
| Net Tidelands Revenues | \$ 37,190,000 | \$ 60,690,000 | \$ 79,980,000 | \$ 130,780,000 |
| Uplands Royalties | | | | |
| Gross Uplands Oil & Gas Revenues | \$ 21,770,000 | \$ 34,160,000 | \$ 44,320,000 | \$ 71,090,000 |
| Less: Settlement Agreement Payment | - | - | - | - |
| Less: Repayment of Advances (30% of Repayment) | (1,900,000) | (1,900,000) | (1,900,000) | (1,900,000) |
| Less: Allocation for Emergency Trust (30% of Funding) | 180,000 | 190,000 | 200,000 | 250,000 |
| Net Uplands Royalty Revenues | \$ 20,040,000 | \$ 32,450,000 | \$ 42,630,000 | \$ 69,440,000 |
| Other Revenues & Costs (Considered Uplands) | | | | |
| Accelerated Uplands Royalty (Pursuant to DA) | \$ 220,000 | \$ 30,000 | \$ 30,000 | \$ 210,000 |
| Bonus Payments (Pursuant to DA) | - | - | - | - |
| 1% Community Improvement Fund (Pursuant to DA) | 4,600,000 | 7,170,000 | 9,280,000 | 14,820,000 |
| Use of City Reserve for Temporary Relocation | (2,960,000) | (2,960,000) | (2,960,000) | (2,960,000) |
| Use of City Reserve for Project Site Remediation | - | - | - | - |
| Use of City Reserve for Permanent Relocation | (2,700,000) | (2,700,000) | (2,700,000) | (2,700,000) |
| Debt Service For Permanent Relocation (Approximate) | (1,940,000) | (1,940,000) | (1,940,000) | (1,940,000) |
| Loss of Storage Site Revenues | (6,390,000) | (6,390,000) | (6,390,000) | (6,390,000) |
| Total Other Revenues & Costs | \$ (9,170,000) | \$ (6,790,000) | \$ (4,680,000) | \$ 1,050,000 |
| Net Uplands Revenues After Other Costs | \$ 10,870,000 | \$ 25,650,000 | \$ 37,940,000 | \$ 70,490,000 |
| Net Tidelands & Uplands Revenues | \$ 48,060,000 | \$ 86,350,000 | \$ 117,920,000 | \$ 201,270,000 |

Note to Figures 43-D: Please see the Note Regarding Oil Prices Evaluated beginning on page 3.

Figure 43-E: Summary of Net Projected Revenues with Project (**\$120/BBL, without DA, \$2014**)

| | Low <u>CBA Low</u> | CBA Expected | CBA High | High <u>Applicant</u> |
|--|------------------------|------------------------|------------------------|--------------------------|
| Tidelands Royalties | | | | |
| Gross Tidelands Oil & Gas Revenues | \$ 120,900,000 | \$ 189,730,000 | \$ 246,220,000 | \$ 394,910,000 |
| Less: Settlement Agreement Payment | - | - | - | - |
| Less: Repayment of Advances (70% of Repayment) | (3,010,000) | (3,010,000) | (3,000,000) | (3,100,000) |
| Less: Allocation for Emergency Trust (70% of Funding) | 570,000 | 570,000 | 580,000 | 600,000 |
| Net Tidelands Revenues | \$ 118,460,000 | \$ 187,290,000 | \$ 243,800,000 | \$ 392,400,000 |
| Uplands Royalties | | | | |
| Gross Uplands Oil & Gas Revenues | \$ 63,840,000 | \$ 100,190,000 | \$ 130,020,000 | \$ 208,530,000 |
| Less: Settlement Agreement Payment | (3,120,000) | (3,120,000) | (3,120,000) | (3,140,000) |
| Less: Repayment of Advances (30% of Repayment) | (1,290,000) | (1,290,000) | (1,290,000) | (1,330,000) |
| Less: Allocation for Emergency Trust (30% of Funding) | 240,000 | 240,000 | 250,000 | 260,000 |
| Net Uplands Royalty Revenues | \$ 59,680,000 | \$ 96,020,000 | \$ 125,850,000 | \$ 204,320,000 |
| Other Revenues & Costs (Considered Uplands) | | | | |
| Accelerated Uplands Royalty (Pursuant to DA) | \$ - | \$ - | \$ - | \$ - |
| Bonus Payments (Pursuant to DA) | - | - | - | - |
| 1% Community Improvement Fund (Pursuant to DA) | - | - | - | - |
| Use of City Reserve for Temporary Relocation | (2,960,000) | (2,960,000) | (2,960,000) | (2,960,000) |
| Use of City Reserve for Project Site Remediation | (50,000) | (50,000) | (50,000) | (50,000) |
| Use of City Reserve for Permanent Relocation | (2,660,000) | (2,660,000) | (2,660,000) | (2,660,000) |
| Debt Service For Permanent Relocation (Approximate) | (9,980,000) | (9,980,000) | (9,980,000) | (9,980,000) |
| Loss of Storage Site Revenues | (6,390,000) | (6,390,000) | (6,390,000) | (6,390,000) |
| Total Other Revenues & Costs | \$ (22,030,000) | \$ (22,030,000) | \$ (22,030,000) | \$ (22,030,000) |
| Net Uplands Revenues After Other Costs | \$ 37,650,000 | \$ 73,990,000 | \$ 103,830,000 | \$ 182,300,000 |
| Net Tidelands & Uplands Revenues | \$ 156,110,000 | \$ 261,290,000 | \$ 347,620,000 | \$ 574,700,000 |

Note to Figures 43-E: Please see the Note Regarding Oil Prices Evaluated beginning on page 3.

Figure 43-F: Summary of Net Projected Revenues with Project (\$120/BBL, DA Terms, \$2014)

| | Low <u>CBA Low</u> | CBA Expected | CBA High | High <u>Applicant</u> |
|--|-----------------------|-----------------------|-----------------------|--------------------------|
| Tidelands Royalties | | | | |
| Gross Tidelands Oil & Gas Revenues | \$ 120,900,000 | \$ 189,730,000 | \$ 246,220,000 | \$ 394,910,000 |
| Less: Settlement Agreement Payment | - | - | - | - |
| Less: Repayment of Advances (70% of Repayment) | (4,290,000) | (4,290,000) | (4,290,000) | (4,390,000) |
| Less: Allocation for Emergency Trust (70% of Funding) | 570,000 | 570,000 | 580,000 | 600,000 |
| Net Tidelands Revenues | \$ 117,180,000 | \$ 186,010,000 | \$ 242,510,000 | \$ 391,120,000 |
| Uplands Royalties | | | | |
| Gross Uplands Oil & Gas Revenues | \$ 63,840,000 | \$ 100,190,000 | \$ 130,020,000 | \$ 208,530,000 |
| Less: Settlement Agreement Payment | - | - | - | - |
| Less: Repayment of Advances (30% of Repayment) | (1,840,000) | (1,840,000) | (1,840,000) | (1,880,000) |
| Less: Allocation for Emergency Trust (30% of Funding) | 240,000 | 240,000 | 250,000 | 260,000 |
| Net Uplands Royalty Revenues | \$ 62,250,000 | \$ 98,590,000 | \$ 128,430,000 | \$ 206,910,000 |
| Other Revenues & Costs (Considered Uplands) | | | | |
| Accelerated Uplands Royalty (Pursuant to DA) | \$ 10,000 | \$ 10,000 | \$ 10,000 | \$ 30,000 |
| Bonus Payments (Pursuant to DA) | - | - | - | - |
| 1% Community Improvement Fund (Pursuant to DA) | 13,300,000 | 20,840,000 | 27,020,000 | 43,310,000 |
| Use of City Reserve for Temporary Relocation | (2,960,000) | (2,960,000) | (2,960,000) | (2,960,000) |
| Use of City Reserve for Project Site Remediation | - | - | - | - |
| Use of City Reserve for Permanent Relocation | (2,700,000) | (2,700,000) | (2,700,000) | (2,700,000) |
| Debt Service For Permanent Relocation (Approximate) | (1,940,000) | (1,940,000) | (1,940,000) | (1,940,000) |
| Loss of Storage Site Revenues | (6,390,000) | (6,390,000) | (6,390,000) | (6,390,000) |
| Total Other Revenues & Costs | \$ (680,000) | \$ 6,860,000 | \$ 13,040,000 | \$ 29,350,000 |
| Net Uplands Revenues After Other Costs | \$ 61,570,000 | \$ 105,450,000 | \$ 141,470,000 | \$ 236,250,000 |
| Net Tidelands & Uplands Revenues | \$ 178,740,000 | \$ 291,450,000 | \$ 383,980,000 | \$ 627,370,000 |

Note to Figures 43-F: Please see the Note Regarding Oil Prices Evaluated beginning on page 3.

5.0 Oil Price Sensitivity

As previously introduced, baseline estimates within the CBA assumed a price per barrel of CMS of \$95 (\$2014, escalated at assumed inflation), based on then current oil prices. Subsequent to City acceptance the CBA the price of oil dropped substantially. As of January 21, 2015 Chevron's posted price for CMS was \$41.77 per barrel. To assist in the evaluation of potential gross and net City revenues under different oil price assumptions Figures 100 and 101 below provide estimated City revenues assuming oil prices ranging from \$40 to \$120 per barrel of CMS. Figure 100 provides estimated figures without the terms of the DA, while Figure 101 considers the terms of the proposed DA.

Figure 100: Estimated Gross and Net Projected City Revenues – Range of Oil Prices (without DA, \$2014)

| Gross City Revenues - without DA (in millions) | | | | | | | | | | |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| <i>California Midway Sunset \$ / Barrel</i> | | | | | | | | | | |
| <i>(CBA Fixed = \$95)</i> | | | | | | | | | | |
| Gross Tidelands | \$ 40.00 | \$ 50.00 | \$ 60.00 | \$ 70.00 | \$ 80.00 | \$ 90.00 | \$ 95.00 | \$100.00 | \$110.00 | \$120.00 |
| CBA Low | \$ 41 | \$ 51 | \$ 61 | \$ 71 | \$ 81 | \$ 91 | \$ 96 | \$ 101 | \$ 111 | \$ 121 |
| CBA Expected | 65 | 80 | 96 | 112 | 127 | 143 | 151 | 158 | 174 | 190 |
| CBA High | 84 | 104 | 125 | 145 | 165 | 185 | 196 | 206 | 226 | 246 |
| Applicant | 135 | 167 | 200 | 232 | 265 | 297 | 314 | 330 | 362 | 395 |
| Gross Uplands | \$ 40.00 | \$ 50.00 | \$ 60.00 | \$ 70.00 | \$ 80.00 | \$ 90.00 | \$ 95.00 | \$100.00 | \$110.00 | \$120.00 |
| CBA Low | \$ 22 | \$ 27 | \$ 32 | \$ 38 | \$ 43 | \$ 48 | \$ 51 | \$ 53 | \$ 59 | \$ 64 |
| CBA Expected | 34 | 42 | 51 | 59 | 67 | 75 | 80 | 84 | 92 | 100 |
| CBA High | 44 | 55 | 66 | 76 | 87 | 98 | 103 | 109 | 119 | 130 |
| Applicant | 71 | 88 | 105 | 123 | 140 | 157 | 166 | 174 | 191 | 209 |
| Gross City Total | \$ 40.00 | \$ 50.00 | \$ 60.00 | \$ 70.00 | \$ 80.00 | \$ 90.00 | \$ 95.00 | \$100.00 | \$110.00 | \$120.00 |
| CBA Low | \$ 63 | \$ 78 | \$ 93 | \$ 109 | \$ 124 | \$ 139 | \$ 147 | \$ 154 | \$ 170 | \$ 185 |
| CBA Expected | 99 | 123 | 147 | 170 | 194 | 218 | 230 | 242 | 266 | 290 |
| CBA High | 128 | 159 | 190 | 221 | 252 | 283 | 299 | 314 | 345 | 376 |
| Applicant | 206 | 255 | 305 | 355 | 405 | 454 | 479 | 504 | 554 | 603 |
| Net City Revenues - without DA (in millions) | | | | | | | | | | |
| <i>California Midway Sunset \$ / Barrel</i> | | | | | | | | | | |
| <i>(CBA Fixed = \$95)</i> | | | | | | | | | | |
| Net Tidelands | \$ 40.00 | \$ 50.00 | \$ 60.00 | \$ 70.00 | \$ 80.00 | \$ 90.00 | \$ 95.00 | \$100.00 | \$110.00 | \$120.00 |
| CBA Low | \$ 39 | \$ 49 | \$ 59 | \$ 69 | \$ 79 | \$ 89 | \$ 94 | \$ 99 | \$ 108 | \$ 118 |
| CBA Expected | 62 | 78 | 93 | 109 | 125 | 140 | 148 | 156 | 172 | 187 |
| CBA High | 81 | 102 | 122 | 142 | 163 | 183 | 193 | 203 | 223 | 244 |
| Applicant | 132 | 165 | 197 | 230 | 262 | 295 | 311 | 327 | 360 | 392 |
| Net Uplands | \$ 40.00 | \$ 50.00 | \$ 60.00 | \$ 70.00 | \$ 80.00 | \$ 90.00 | \$ 95.00 | \$100.00 | \$110.00 | \$120.00 |
| CBA Low | \$ (4) | \$ 1 | \$ 6 | \$ 11 | \$ 17 | \$ 22 | \$ 25 | \$ 27 | \$ 32 | \$ 38 |
| CBA Expected | 8 | 16 | 24 | 33 | 41 | 49 | 53 | 57 | 66 | 74 |
| CBA High | 18 | 29 | 40 | 50 | 61 | 72 | 77 | 82 | 93 | 104 |
| Applicant | 45 | 62 | 79 | 96 | 114 | 131 | 139 | 148 | 165 | 182 |
| Net City Total | \$ 40.00 | \$ 50.00 | \$ 60.00 | \$ 70.00 | \$ 80.00 | \$ 90.00 | \$ 95.00 | \$100.00 | \$110.00 | \$120.00 |
| CBA Low | \$ 34 | \$ 49 | \$ 65 | \$ 80 | \$ 95 | \$ 110 | \$ 118 | \$ 126 | \$ 141 | \$ 156 |
| CBA Expected | 70 | 94 | 118 | 142 | 166 | 190 | 202 | 214 | 237 | 261 |
| CBA High | 100 | 131 | 162 | 193 | 224 | 255 | 270 | 286 | 317 | 348 |
| Applicant | 177 | 227 | 276 | 326 | 376 | 426 | 450 | 475 | 525 | 575 |

Note to Figure 100: Values assuming an oil price of \$95 per barrel and CBA Expected production estimates are "circled" as they represent the "base case" in the CBA. Additionally, please see the Note Regarding Oil Prices Evaluated beginning on page 3.

Figure 101: Estimated Gross and Net Projected City Revenues – Range of Oil Prices (DA Terms, \$2014)

| Gross City Revenues - DA Terms (in millions) | | | | | | | | | | |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| <i>California Midway Sunset \$ / Barrel</i> | | | | | | | | | | |
| <i>(CBA Fixed = \$95)</i> | | | | | | | | | | |
| Gross Tidelands | \$ 40.00 | \$ 50.00 | \$ 60.00 | \$ 70.00 | \$ 80.00 | \$ 90.00 | \$ 95.00 | \$100.00 | \$110.00 | \$120.00 |
| CBA Low | \$ 41 | \$ 51 | \$ 61 | \$ 71 | \$ 81 | \$ 91 | \$ 96 | \$ 101 | \$ 111 | \$ 121 |
| CBA Expected | 65 | 80 | 96 | 112 | 127 | 143 | 151 | 158 | 174 | 190 |
| CBA High | 84 | 104 | 125 | 145 | 165 | 185 | 196 | 206 | 226 | 246 |
| Applicant | 135 | 167 | 200 | 232 | 265 | 297 | 314 | 330 | 362 | 395 |
| Gross Uplands | \$ 40.00 | \$ 50.00 | \$ 60.00 | \$ 70.00 | \$ 80.00 | \$ 90.00 | \$ 95.00 | \$100.00 | \$110.00 | \$120.00 |
| CBA Low | \$ 27 | \$ 33 | \$ 39 | \$ 45 | \$ 52 | \$ 58 | \$ 61 | \$ 64 | \$ 71 | \$ 77 |
| CBA Expected | 41 | 51 | 61 | 71 | 81 | 91 | 96 | 101 | 111 | 121 |
| CBA High | 54 | 67 | 79 | 92 | 105 | 118 | 125 | 131 | 144 | 157 |
| Applicant | 86 | 107 | 127 | 148 | 169 | 190 | 200 | 210 | 231 | 252 |
| Gross City Total | \$ 40.00 | \$ 50.00 | \$ 60.00 | \$ 70.00 | \$ 80.00 | \$ 90.00 | \$ 95.00 | \$100.00 | \$110.00 | \$120.00 |
| CBA Low | \$ 68 | \$ 84 | \$ 100 | \$ 117 | \$ 133 | \$ 149 | \$ 157 | \$ 165 | \$ 182 | \$ 198 |
| CBA Expected | 106 | 132 | 157 | 183 | 208 | 234 | 247 | 260 | 285 | 311 |
| CBA High | 138 | 171 | 204 | 237 | 270 | 304 | 320 | 337 | 370 | 403 |
| Applicant | 221 | 274 | 327 | 380 | 434 | 487 | 514 | 540 | 593 | 647 |
| Net City Revenues - DA Terms (in millions) | | | | | | | | | | |
| <i>California Midway Sunset \$ / Barrel</i> | | | | | | | | | | |
| <i>(CBA Fixed = \$95)</i> | | | | | | | | | | |
| Net Tidelands | \$ 40.00 | \$ 50.00 | \$ 60.00 | \$ 70.00 | \$ 80.00 | \$ 90.00 | \$ 95.00 | \$100.00 | \$110.00 | \$120.00 |
| CBA Low | \$ 37 | \$ 47 | \$ 57 | \$ 67 | \$ 77 | \$ 87 | \$ 92 | \$ 97 | \$ 107 | \$ 117 |
| CBA Expected | 61 | 76 | 92 | 108 | 123 | 139 | 147 | 155 | 170 | 186 |
| CBA High | 80 | 100 | 121 | 141 | 161 | 182 | 192 | 202 | 222 | 243 |
| Applicant | 131 | 163 | 196 | 228 | 261 | 294 | 310 | 326 | 359 | 391 |
| Net Uplands | \$ 40.00 | \$ 50.00 | \$ 60.00 | \$ 70.00 | \$ 80.00 | \$ 90.00 | \$ 95.00 | \$100.00 | \$110.00 | \$120.00 |
| CBA Low | \$ 11 | \$ 17 | \$ 23 | \$ 30 | \$ 36 | \$ 43 | \$ 46 | \$ 49 | \$ 55 | \$ 62 |
| CBA Expected | 26 | 36 | 46 | 56 | 66 | 76 | 81 | 86 | 95 | 105 |
| CBA High | 38 | 51 | 64 | 77 | 90 | 103 | 109 | 116 | 129 | 141 |
| Applicant | 70 | 91 | 112 | 133 | 153 | 174 | 184 | 195 | 216 | 236 |
| Net City Total | \$ 40.00 | \$ 50.00 | \$ 60.00 | \$ 70.00 | \$ 80.00 | \$ 90.00 | \$ 95.00 | \$100.00 | \$110.00 | \$120.00 |
| CBA Low | \$ 48 | \$ 64 | \$ 81 | \$ 97 | \$ 113 | \$ 130 | \$ 138 | \$ 146 | \$ 162 | \$ 179 |
| CBA Expected | 86 | 112 | 138 | 163 | 189 | 215 | 227 | 240 | 266 | 291 |
| CBA High | 118 | 151 | 184 | 218 | 251 | 284 | 301 | 318 | 351 | 384 |
| Applicant | 201 | 255 | 308 | 361 | 414 | 468 | 494 | 521 | 574 | 627 |

Note to Figure 101: Values assuming an oil price of \$95 per barrel and CBA Expected production estimates are "circled" as they represent the "base case" in the CBA. Additionally, please see the Note Regarding Oil Prices Evaluated beginning on page 3.

6.0 School Revenues

6.1 School District Revenues

Should the proposed Project be approved, the Hermosa Beach City School District (“School District”) is entitled to a royalty share of oil and gas produced on the portion of land that it owns in the Uplands, as well as a \$0.20 barrel tax on every barrel of oil produced at the Project Site (please see Section 8.3 on page 55 of the CBA). Given the prior discussion on changes in oil prices, net School District revenues assuming oil prices ranging from \$40 to \$120 per barrel of CMS (\$2014) were estimated and are illustrated in Figure 102 below. For reference, estimated School District revenues do not change under the terms of the proposed DA.

Figure 102: Estimated Net School District Revenues (in millions of \$2014, no change under DA Terms)
California Midway Sunset \$ / Barrel

| School District Net Rev (\$2014) | (CBA Fixed = \$95) | | | | | | | | | | |
|-------------------------------------|--------------------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|--|
| | \$ 40.00 | \$ 50.00 | \$ 60.00 | \$ 70.00 | \$ 80.00 | \$ 90.00 | \$ 95.00 | \$ 100.00 | \$ 110.00 | \$ 120.00 | |
| CBA Low | \$ 0.9 | \$ 1.0 | \$ 1.0 | \$ 1.1 | \$ 1.1 | \$ 1.2 | \$ 1.2 | \$ 1.2 | \$ 1.2 | \$ 1.3 | |
| CBA Expected | 1.4 | 1.5 | 1.5 | 1.6 | 1.7 | 1.7 | 1.8 | 1.8 | 1.9 | 1.9 | |
| CBA High | 1.8 | 1.8 | 1.9 | 2.0 | 2.1 | 2.2 | 2.2 | 2.3 | 2.4 | 2.5 | |
| Applicant | 3.1 | 3.2 | 3.3 | 3.5 | 3.6 | 3.8 | 3.8 | 3.9 | 4.0 | 4.2 | |

Note to Figure 102: The value assuming an oil price of \$95 per barrel and CBA Expected production estimates is “circled” as it represents the “base case” in the CBA. Additionally, please see the Note Regarding Oil Prices Evaluated beginning on page 3.

6.2 Education Foundation Revenues

Pursuant to Section (12)(D) of the ballot measure and ordinance for the proposed Project, the Applicant has assigned the Education Foundation a 1% overriding royalty interest in oil and gas produced from the Project Site. Additionally, pursuant to the same language, the Applicant has committed to providing the Education Foundation an upfront payment of \$1 million in the form of accelerated future royalty revenues. The estimated revenues that would flow to the Education Foundation assuming oil prices ranging from \$40 to \$120 per barrel of CMS (\$2014) follows in Figure 103 below.

Figure 103: Estimated Net School District Revenues (in millions of \$2014, DA Terms)

California Midway Sunset \$ / Barrel

| Ed Foundation Net Rev (\$2014) | (CBA Fixed = \$95) | | | | | | | | | |
|-----------------------------------|--------------------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|
| | \$ 40.00 | \$ 50.00 | \$ 60.00 | \$ 70.00 | \$ 80.00 | \$ 90.00 | \$ 95.00 | \$ 100.00 | \$ 110.00 | \$ 120.00 |
| CBA Low | \$ 4.5 | \$ 5.6 | \$ 6.7 | \$ 7.8 | \$ 8.9 | \$ 10.0 | \$ 10.5 | \$ 11.1 | \$ 12.1 | \$ 13.2 |
| CBA Expected | 7.1 | 8.8 | 10.5 | 12.2 | 13.9 | 15.6 | 16.5 | 17.4 | 19.1 | 20.8 |
| CBA High | 9.2 | 11.4 | 13.6 | 15.9 | 18.1 | 20.3 | 21.4 | 22.5 | 24.7 | 27.0 |
| Applicant | 14.7 | 18.3 | 21.9 | 25.4 | 29.0 | 32.6 | 34.3 | 36.1 | 39.7 | 43.2 |

Note to Figure 103: The value assuming an oil price of \$95 per barrel and CBA Expected production estimates is “circled” as it represents the “base case” in the CBA. Additionally, please see the Note Regarding Oil Prices Evaluated beginning on page 3.

During the January 27, 2015 City Council Meeting the CBA Team was asked to add a note to this DA Supplement that the Education Foundation has not agreed to accept (nor agreed to not accept) the 1% overriding royalty from the Applicant. It is the CBA Team’s understanding that, as a body, the Education Foundation has not discussed accepting or not accepting the funds. Further, a representative of the Education Foundation stated that the Education Foundation “does not take a stance or have an opinion on the proposed oil project or any political issue” and is “waiting for the community to decide what is best for our City on March 3.”

7.0 Conclusion

In conclusion, the Authors estimate that should the proposed Project be approved, the various public benefit provisions of the DA notably increase the estimated revenues that would be expected to accrue to the City, and serve to provide a greater share of overall revenues to the Uplands fund.

Based on production estimates completed as part of the CBA, an assumed oil price of \$95 per barrel, and excluding the terms of the DA, the Authors estimated that the over the 35 year life of the Project the City would realize net revenues of approximately \$118 to \$270 million (\$2014). Of this total, approximately \$25 to \$77 million (net, 21 - 29%) was estimated to accrue to the City's General Fund, and the balance to the City's Tideland Fund. Utilizing production estimates from the Applicant rather than those from the CBA, the Authors estimated that the City would realize net revenues of approximately \$450 million (\$2014), of which it was estimated that \$139 million (net, 31%) would accrue to the City's General Fund.

As evaluated herein, under the proposed DA, revenue estimates would increase to approximately \$138 to \$301 million (\$2014). Of this total, approximately \$46 to \$109 million (net, 33 - 36%) is estimated to accrue to the City's General Fund, and the balance to the City's Tideland Fund.

Utilizing production estimates from the Applicant rather than those from this CBA, the Authors estimate that the City would realize net revenues of approximately \$494 million (\$2014), of which it is estimated that \$184 million (net, 37%) would accrue to the City's General Fund.

Subsequent to the City's acceptance of the CBA, and prior to the drafting of this DA Supplement the price of oil dropped substantially from roughly \$90 - \$100 per barrel of California Midway Sunset crude to just above \$40 per barrel (\$41.77 posted by Chevron as of January 21, 2015). Given the City's royalty structures, the figures estimated above could decrease substantially should current pricing be representative of a long term trend. As such readers should carefully evaluate the alternative pricing scenarios and considerations discussed herein.

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| The analyses, projections, assumptions, rates of return, and any examples presented herein are for illustrative purposes and are not a guarantee of actual and/or future results. Project pro forma and tax analyses are projections only. Actual results may differ materially from those expressed in this analysis. |
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