

# **Need for Supplemental EIS for Matagorda Ship Channel Improvement Project: Economic Justification**

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# 1 Introduction

In August 2019, the U.S. Army Corps of Engineers (USACE) released a Final Feasibility Report and Environmental Impact Statement for the deepening and widening of the Matagorda Ship Channel (Matagorda Ship Channel Improvement Project or MSCIP). Following the Final EIS (FEIS), the Project was authorized by Congress in December 2020.

The FEIS analysis estimates benefits for MSCIP based on the following key assumptions:

- MSCIP would enable cargo vessels that are larger and more fully loaded to come into port, thereby reducing transportation costs over a 50-year period (2024-2073).
- These estimated benefits are mostly (68%) from crude oil exports, with the remainder (32%) from chemical exports and imports.

Since the August 2019 FEIS, there have been numerous very significant changes in the economic context related to US crude exports. These include:

1. a dramatic tenfold increase in the crude export volumes enabled by the MSCIP (compared with the FEIS projections), based on estimates by Max Midstream (the Project's new private partner);
2. a significant and continuing increase in US crude exports; and
3. an increase in US crude oil prices, which is highly favorable for exports.

These three changes in the economic context will continue to substantially affect the crude volumes exported via the Matagorda Ship Channel; consequently, export volumes are expected to differ dramatically from what was assumed in the FEIS. The combination of these changes is likely to result in significant environmental impacts that were not considered in the August 2019 EIS.

Section 2 describes the three significant changes in the economic context related to crude oil exports, listed above.

Section 3 discusses two major simplifying assumptions in the FEIS that are no longer valid:

1. crude export volumes from the Port of Port Lavaca – Point Comfort (the Port)<sup>1</sup> will be the same with or without the Project; and
2. the Eagle Ford Shale (vs the Permian Basin) as the main source of exports from the Matagorda Ship Channel.

The Report demonstrates that:

- circumstances have changed materially since the FEIS made these assumptions;
- these changes substantially undercut the validity of the FEIS in evaluating the impacts of the Project.

Section 4 is a Backgrounder, which discusses the evolution of crude oil prices, and US crude production and exports in recent years (leading up to the COVID pandemic until the present), with a particular focus on the Permian Basin. The Permian Basin has become the principal driver for US crude production and exports. And the Permian will also be a key driver of crude exports enabled by the MSCIP. The objective of the Backgrounder is to provide additional context for the economic analysis presented in this report.

## 2 Significant Changes in Economic Context Related to Crude Oil Exports

### 2.1 Dramatic Increase in Projected Crude Exports via the Port Requires Increased Crude Production

The most significant change in the economic context is the dramatic tenfold increase projected in the crude export volumes enabled by the MSCIP (compared with the FEIS projections), based on estimates by Max Midstream (the Project’s new private partner).<sup>2</sup> According to Max

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<sup>1</sup> The Port of Port Lavaca – Point Comfort, the port served by the Matagorda Ship Channel, is referred to as the Port in the FEIS and in this report. According to the website of the Calhoun Port Authority (<https://www.texasports.org/ports/port-lavaca/>), the Calhoun Port Authority was previously known as the Port of Port Lavaca – Point Comfort. However, to be consistent with the FEIS, this report will refer to the seaport under the authority of the Calhoun Port Authority (i.e. the Port of Port Lavaca – Point Comfort) as the Port.

<sup>2</sup> As reported on Max Midstream’s website (April 6, 2021, emphasis added):

The plan essentially is to grow crude export capacity from just more than 100,000 b/d now to about 325,000 b/d next year when new pipelines and Permian Basin connections are completed, **and then to 650,000 b/d in 2023 when the dredging project is finished.**

(<https://maxmidstream.com/max-midstream-to-start-texas-crude-exports-in-may/>)

Midstream’s business plan, the MSCIP will result in substantial increases in crude exports from the Port. Consequently, the Project will result in:

- substantially increased US crude oil production
- significant environmental impacts not considered in the FEIS.

Over the 50-year analysis period (2024-2073), the FEIS assumed that crude oil exports enabled by the MSCIP would:

- range between 65,000 – 70,000 bbl/day from 2024 to 2038; then
- remain at approximately 65,000 bbl/day from 2039 onward.<sup>3</sup>

In October 2020 (over a year after the FEIS was released), Max Midstream partnered with the Calhoun Port Authority to fund the Project. As the Project’s private partner, Max Midstream is now projecting crude exports of 650,000 bbl/day. This is a dramatic tenfold increase in projected crude exports via the Matagorda Ship Channel and enabled by the Project.

In fact, 650,000 bbl/day represents 20% of US crude oil exports in 2020. According to Max Midstream’s business plan, there will be a massive increase in crude exports from the Port. This will require a significant increase in US crude production (over the current production level). In other words, Max Midstream’s estimated crude export volumes enabled by the MSCIP will result in growth in US exports (over current exports) and growth in overall US crude production. The increased crude exports and crude oil production enabled by the Project are big enough to significantly affect the US crude markets.

Given the magnitude of Max Midstream’s projections, the additional infrastructure provided by MSCIP will substantially increase US crude oil exports and in turn crude oil production. This is particularly relevant in the context of the ongoing crude export boom and relatively higher oil prices, which will also increase crude oil exports and crude oil production.

## 2.2 US Crude Export Boom

Since the ban on most crude oil exports was lifted in December 2015, US crude export volumes have increased every year. According to EIA data (as shown in Figure 1), US crude exports increased from about 700,000 barrels per day (0.7 MMbbl/day<sup>4</sup>) in 2016 to 1.2 MMbbl/day in 2017, 2.0 MMbbl/day in 2018, 3.0 MMbbl/day in 2019, reaching a record high of 3.2 MMbbl/day in 2020. Since the export ban was lifted, related export terminals, infrastructure

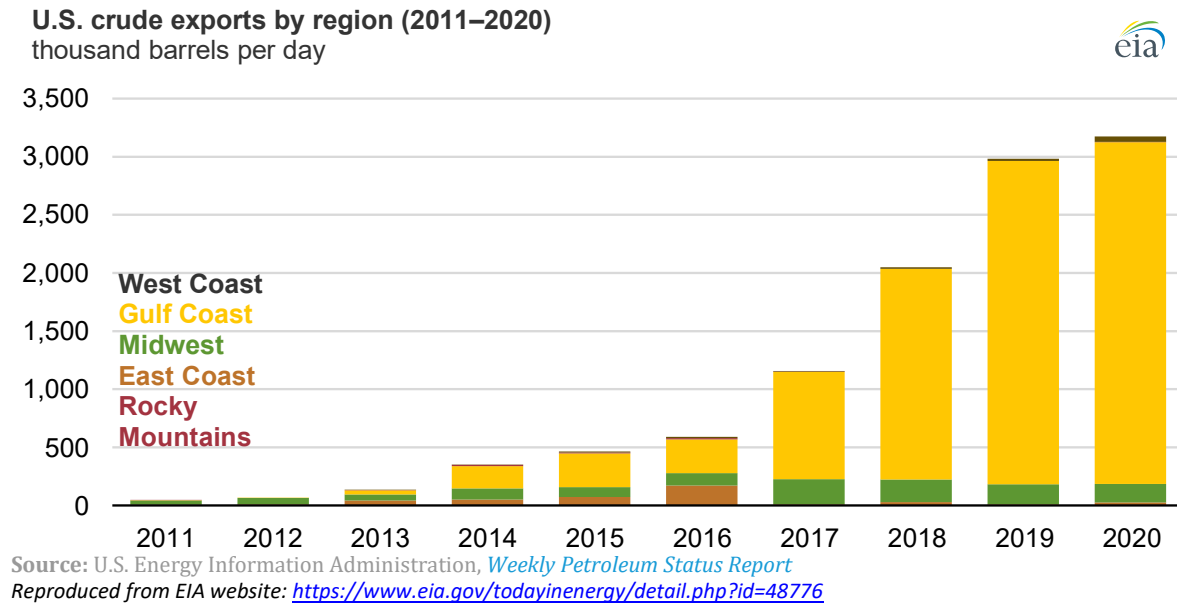
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<sup>3</sup> See FEIS, pp. 64-65. The FEIS estimates crude oil export volumes in metric tons per year, whereas Max Midstream’s projections are in barrels/day (bbl/day or b/d); so TGG has converted the metric tonnage to bbl/day to facilitate comparison. Note that 50 metric tons per year are equivalent to about 1 barrel per day.

<sup>4</sup> MMbbl/day is an abbreviation for million barrels per day, a unit of volume flow rate used throughout this report.

and transportation logistics have expanded over time (including docks, loading arms, tankage for high-volume exports, and pipelines from the Permian Basin to the US Gulf Coast).

Figure 1: US crude exports by region (2011-2020)



As will be discussed in more detail in Section 4, the crude export boom has been driven by exports of output from the Permian Basin via Gulf Coast ports.

As demonstrated in Section 4, Permian production and US crude exports are closely related:

- increased production in the Permian has been mostly exported
- US crude exports have mostly been from increased production in the Permian
- this close relationship between Permian production and crude exports is likely to continue as the US and global economies recover from recent disruptions.

The COVID pandemic resulted in significant transitory decreases in US and global energy demand, as well as substantially lower crude oil prices. Despite the pandemic and the resulting volatility in oil markets, US crude export volumes continued to increase in 2020 (albeit at a slower pace than the preceding four years). US crude oil exports remain high in 2021.

The FEIS for MSCIP was prepared in 2018-2019. Therefore, this FEIS was based on US crude export data for the years up to and including 2018 (with 2018 as the last year of historical data on crude exports). As shown in Figure 1, export volumes from 2015 to 2018 were much lower than those in 2019 and 2020. The change from 2018 to 2019 was particularly dramatic with a 50% increase in US crude exports from 2.0 MMbbl/day to 3.0 MMbbl/day in 2019.

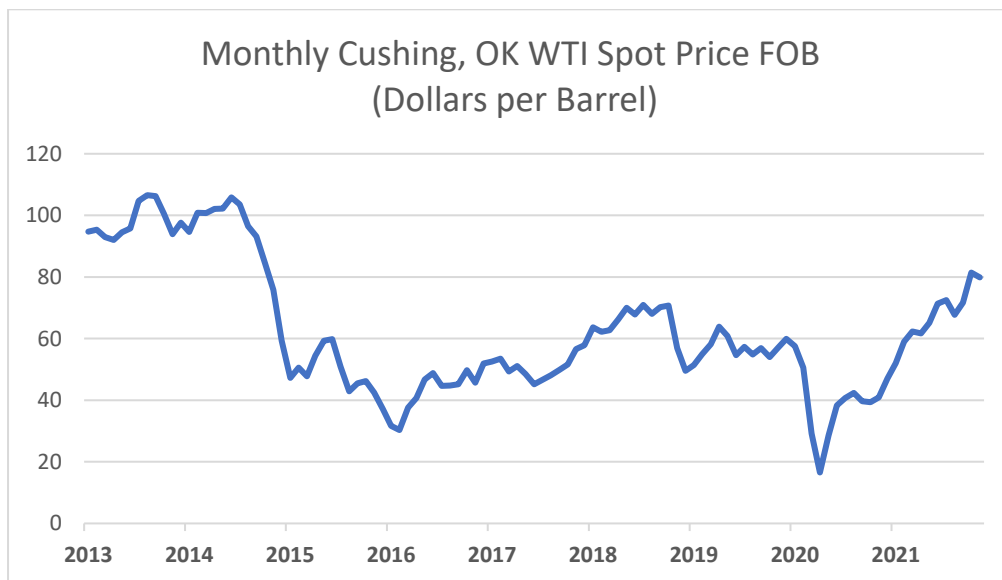
The ongoing US crude export boom – and particularly the dramatic increases in the US exports since the preparation of the FEIS – represent significant changes in the economic context related to US crude exports.

### 2.3 Increase in US Crude Prices since FEIS

A third major change in the economic context related to crude oil exports since the preparation of the FEIS is the increase in US crude oil prices. In Q4 2021, crude prices reached their highest levels since 2014 (over \$80/bbl).

US crude oil markets typically have strong relationships between prices, production and exports. In response to higher crude oil prices, production and exports will typically increase. But there can be significant time lags for production and exports to be ramped in response to changes in prices and profitability. The FEIS also recognized that US crude exports are sensitive to and fluctuate with crude oil prices, noting that the “volatility in export levels between January 2015 and September 2017 can be attributed to the price of oil during this time frame.” (FEIS, Appendix A, p. 14 and Figure 2-11, p. 15).

Figure 2: Monthly WTI Crude Oil Spot Prices (January 2013-November 2021)



Source: U.S. Energy Information Administration, PETROLEUM & OTHER LIQUIDS DATA.  
Chart generated with data set downloaded from : <https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=RWTC&f=M>

As shown in Figure 2, since the FEIS was prepared in 2018-2019, there has been an increase in US crude oil prices. As discussed in the previous section, in 2020, the early COVID shock resulted in significant transitory decreases in US and global energy demand, as well as substantial crude oil

price drops. In 2021, US crude prices have dramatically increased to over \$80/bbl in October and November.<sup>5</sup>

See Backgrounder (Section 4) for a more detailed discussion of crude production in response to these recent higher prices (in the Permian Basin, in the Eagle Ford Basin and in US crude production overall).

US crude production and exports are likely to increase (perhaps quite rapidly, especially if crude prices remain relatively high). As discussed in Section 4, the Permian boomed in 2017-2019 when crude prices were \$45-\$70/bbl. In the short-to-medium term, it is highly likely that:

- prices will be at least that high and
- the Permian will continue to grow driving increased US crude exports.

Therefore it is also highly likely that additional export capacity (enabled by projects such as MSCIP) will also play a role in increasing crude production and exports. More specifically, increased crude prices are highly favorable to the implementation of Max Midstream's plan (to ship large volumes of crude from the Port).

As discussed in Section 2.1, according to Max Midstream's business plan, the MSCIP will result in substantial increases in crude exports from the Port. Consequently, the Project will result in:

- substantially increased US crude oil production
- significant environmental impacts not considered in the FEIS.

The combination of higher crude prices with the implementation of Max Midstream's plan represents a very substantial change since the FEIS.

### 3 Major Assumptions in the FEIS No Longer Valid

The FEIS made two major simplifying assumptions related to the US crude export volumes to be shipped via the Matagorda Shipping Channel:

1. Crude oil export volumes from the Port would be the same with or without the MSCIP.
2. The FEIS focused on the Eagle Ford Shale (vs the Permian Basin) as the main source of crude exports from the Port.

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<sup>5</sup> In response to renewed concerns about COVID, crude prices dropped below \$70/bbl at the end of November 2021.



These simplifying assumptions are no longer valid in the current economic context. As demonstrated in this section, circumstances have changed materially since the FEIS. Consequently, these changes substantially undercut the validity of the FEIS in evaluating the impacts of the Project.

### 3.1 Crude Export Volumes

The FEIS assumed that crude oil export volumes from the Port would be the same with or without the MSCIP. In fact, the HarborSym model utilized in the FEIS treats total export volumes as fixed with or without the Project, varying the the number and size of vessels under each scenario. A lower number of ships which are larger and more fully loaded (with MSCIP) would replace a higher number of ships which are smaller and less fully loaded (without MSCIP), but the total tonnage of exports would remain the same (FEIS, Section 3.2.2.5, p. 64 and Section 4.8.1, pp. 89-90).

However, as discussed above, Max Midstream’s projections of 650,000 bbl/day enabled by MSCIP are ten times the crude export volumes assumed in the FEIS. Max Midstream is projecting exports via the Port that represent a significant share (20%) of total 2020 US crude exports.

A key objective of the Project is to facilitate more economic and efficient export of crude oil (via ships that are larger and more fully loaded). Throughout its website, Max Midstream stresses that the MSCIP will enable economic and efficient export for large volumes of crude (emphasis added):

The plan essentially is to grow crude export capacity from just more than 100,000 b/d now to about 325,000 b/d next year when new pipelines and Permian Basin connections are completed, and **then to 650,000 b/d in 2023 when the dredging project is finished.**<sup>6</sup>

[...]

Max Midstream provides a critical bridge between the Texas upstream sectors in the Permian Basin and Eagle Ford with a new global alternative export facility at the Port of Calhoun. While existing export capacity on the US Gulf Coast is crowded, the Max Midstream pipeline and terminal system provides a less congested, dedicated path to the US Gulf Coast<sup>7</sup>

[...]

Lack of congestion in the Port allows shorter wait times and minimizes congestion-related demurrage charges.<sup>8</sup>

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<sup>6</sup> <https://maxmidstream.com/max-midstream-to-start-texas-crude-exports-in-may/>

<sup>7</sup> <https://maxmidstream.com/about/>

<sup>8</sup> <https://maxmidstream.com/operations/#seahawk>

Given the dramatic tenfold increase in Max Midstream’s current projections (over the FEIS projections), the FEIS assumption that shipping volumes will not increase is no longer valid.

### 3.2 Focus on Eagle Ford Shale as Main Source of Exports for the MSCIP

The FEIS also made a simplifying assumption to focus on the Eagle Ford Shale as the main source of exports for the MSCIP. FEIS Section 2.2.4.4 (p. 34) on Eagle Ford indicates that “[o]perators expect that the shale play will continue to be developed for decades (<http://eaglefordshale.com/>).” TGG notes that the website provided has not been updated since early 2019. This FEIS section concludes that Eagle Ford’s proximity to the Port “positions the Port to be an efficient exporter of commodities produced by the Shale.”

However as indicated above and as will be further discussed in Section 4, the Permian Basin has become the principal driver for US crude production and exports. And the Permian will also be a key driver of crude exports enabled by the MSCIP. There are only two mentions of the Permian Basin in the entire FEIS.<sup>9 10</sup>

The FEIS focus on Eagle Ford is no longer valid given:

- the dramatic increase in crude exports now estimated by Max Midstream
- significant changes in US crude export market context since the FEIS
- that the bulk of US crude exports have come from the Permian Basin and this is likely to continue as the US and global economies recover from recent disruptions.

Further analysis in an SEIS is required to consider the Permian Basin as a key driver of crude exports enabled by the MSCIP.

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<sup>9</sup> FEIS, Section 1.7.4, p. 21; Appendix A, Section 2.1.4, p. 7.

<sup>10</sup> It is notable, however, that the FEIS devotes several sections to Petra Nova, a now shuttered carbon capture facility. According to the FEIS, Petra Nova, which came online in late 2016, “is the world’s largest post-combustion carbon capture facility that is installed on an existing coal-fueled power plant” (FEIS, Section 2.2.4.5, p. 35. See also, Section 3.2.2.4, p. 64). Crude oil “estimated to be recovered and transported from the Petra Nova project” accounts for a small portion of the crude exports in the FEIS forecast. This inclusion of oil from the Petra Nova project was based on its proximity to the Port. Carbon dioxide from Petra Nova was compressed and transported 80 miles via pipeline to the West Ranch oil field, for use in Enhanced Oil Recovery (EOR) to increase production. The FEIS assumed that this increased production would be shipped via the Port, which is 15 miles from the West Ranch oil field.

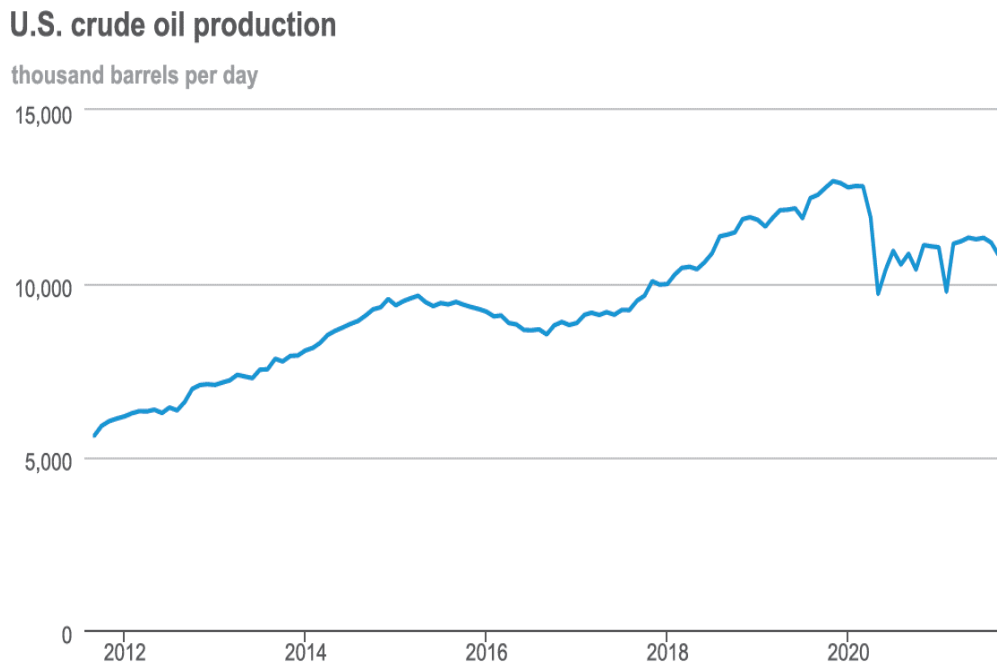
In response to evolving oil market and economic conditions, Petra Nova operations were suspended on May 1, 2020. This is a significant change since the FEIS was produced. It affects the environmental impacts of the Project, notably from increased Permian crude production. As discussed above and as will be further explored in Section 4, the Permian will be a main source of crude exports for the Port (vs the more proximate Eagle Ford and Petra Nova/West Ranch).

The Backgrounder in Section 4 will discuss the importance of the Permian Basin as the principal driver for US crude production and exports and a key driver of crude exports enabled by the Project.

## 4 Backgrounder on Evolution of Crude Oil Prices, Production and Exports

This Backgrounder discusses the evolution of crude oil prices, and US crude production and exports in recent years (leading up to the COVID pandemic until the present), with a particular focus on the Permian Basin. The Permian Basin has become the principal driver for US crude production and exports. And the Permian will also be a key driver of crude exports enabled by the MSCIP. As outlined in Section 3.2, the FEIS focussed on the Eagle Ford Shale (vs the Permian Basin) as the main source of exports enabled by the Project. In the current context, an SEIS is therefore required and must focus on the Permian Basin as a key driver for exports enabled by the Project. The objective of the Backgrounder is to provide additional context for the economic analysis presented in this report.

Figure 3: Monthly US Crude Oil Production (September 2011-September 2021)



Source: U.S. Energy Information Administration

Reproduced from EIA website: <https://www.eia.gov/petroleum/production/>, accessed 12/03/2021

As indicated in Section 2, the COVID pandemic had a significant transitory effect on US and global demand and prices. As shown in Figure 3, total US crude production:

- had been growing in the period leading up to the COVID pandemic,
- dropped in 2020 during the COVID shock,
- has since partially rebounded,
- but is still down by about 1.5 MMbbl/day from peak pre-COVID (Q4 2019-Q1 2020).

As shown in Figure 3, the response to higher crude prices has so far been somewhat muted. Despite much higher crude prices, total US production US crude production remains substantially lower than pre-COVID.

This muted response (in terms of drilling and crude oil production) is a change from the last decade (especially 2011-2019), when US producers responded more quickly to higher prices by increasing drilling and production. This muted response to higher crude prices is likely due to multiple factors, including the following:

- Crude drilling and production require intensive coordination of multiple specialized inputs, including equipment, materials, capital and labor. The pandemic has disrupted supply for goods and labor, with resulting shortages and cost escalation.
- Producers have just gone through a period in which crude prices were low for a number of years, followed by a significant drop during the COVID shock. Their priority may be to improve their financial position and pay off debts prior to ramping up spending to increase production.

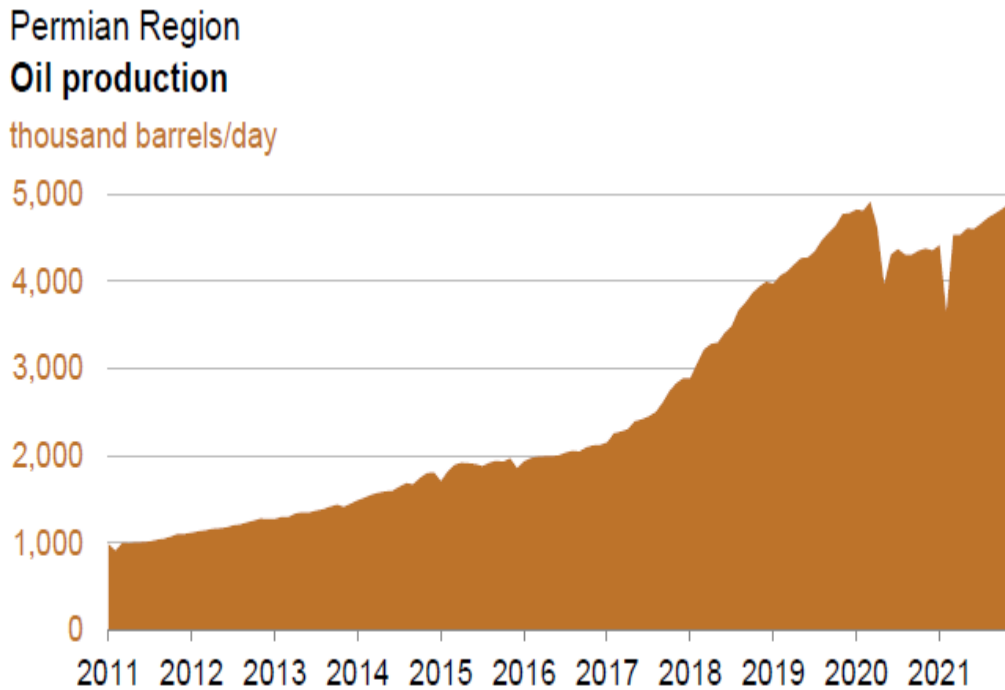
These constraints will abate over time as the US and global economies continue to recover from disruptions related to the COVID pandemic. With crude prices high, and expected to remain high, US crude drilling, production and exports will increase.

Total US crude production is from many fields in many locations, with some variation in trends in various locations. With higher crude prices in 2021, there is growth in crude production in the Permian Basin, with other basins flat or declining.

The Permian Basin (mostly in West Texas, but also extending westward into eastern New Mexico) is the most prolific hydrocarbon production region in the US, accounting for about 30%

of US crude production and 14% of US natural gas production in 2020.<sup>11</sup> The Permian was the big growth engine for US crude production and exports in the period following lifting of the export ban in December 2015 leading up to COVID. In that period, Permian output and US crude exports both increased by almost 3 MMbbl/day (see Figure 3 and Figure 4).<sup>12</sup>

Figure 4: Permian Region Oil Production (2011-2021)



U. S. Energy Information Administration | Drilling Productivity Report

Source: U.S. Energy Information Administration, <https://www.eia.gov/petroleum/drilling/archive/2021/11/pdf/dpr-full.pdf> p. 9.<sup>13</sup>

As shown in Figure 4, virtually all of this growth was in 2017-2019, when the annual increase in Permian output and crude exports was about 900,000 bbl/day. Permian output dropped in 2020 during the COVID shock. But it has since rebounded to around peak pre-COVID (approximately 4.9 MMbbl/day).

<sup>11</sup> As a byproduct of crude oil production, there is often some associated gas (natural gas and natural gas liquids (such as propane)). The Permian is the biggest producer of associated gas in the US, but there is also sizable production in the Eagle Ford and Bakken Shale fields (which are discussed later in this section).

<https://www.eia.gov/todayinenergy/detail.php?id=50016>

<https://www.eia.gov/todayinenergy/detail.php?id=49256>

<sup>12</sup> US crude exports are mainly output from the Permian, but there are some exports of other US crudes.

<sup>13</sup> Figure 4 for the Permian has been reproduced from the source with scaling adjusted to increase height, so that its vertical scale is more similar to the vertical scale in Figure 5 for Eagle Ford. Production of 1 MMbbl/day is ~7/16" high in Figure 4 and ~12/16" high in Figure 5.

The Permian is both highly prolific and competitive. Production boomed in 2017-2019, when crude prices were approximately \$45-\$70/bbl. And Permian production is again growing rapidly in response to recent higher prices for crude (\$60-\$85/bbl) and gas.<sup>14</sup> With prices expected to remain relatively high, Permian production will likely continue to increase (perhaps very rapidly).

As demonstrated by these data, Permian production and US crude exports are closely related:

- increased production in the Permian has been mostly exported
- US crude exports have mostly been from increased production in the Permian
- this close relationship between Permian production and crude exports is likely to continue as the US and global economies recover from recent disruptions.

As discussed in Section 2.3, as the Permian production continues to grow (driving increased US crude exports), it is highly likely that additional export capacity (enabled by projects such as MSCIP) will also play a role in increasing crude production and exports.

Outside the Permian, US crude production has been more stable overall in the period from 2015 leading up to COVID. There has been growth in some locations in some years, but this has been largely offset by declines elsewhere and in other years. So the growth in US crude production from 2015 up to early 2020, has been virtually all from the Permian Basin.

US production outside the Permian dropped substantially during the COVID shock. Production has since stabilized, but is still down by about 1.5 MMbbl/day from pre-COVID volumes. The response to recent higher crude prices has so far been muted, with a limited amount of new production offset by ongoing declines from existing wells.

The FEIS analysis of crude exports makes only passing reference to the Permian Basin.<sup>15</sup> The FEIS instead focused on output from the Eagle Ford Shale. Eagle Ford extends over a large area of South Texas, with portions proximate to the Port.

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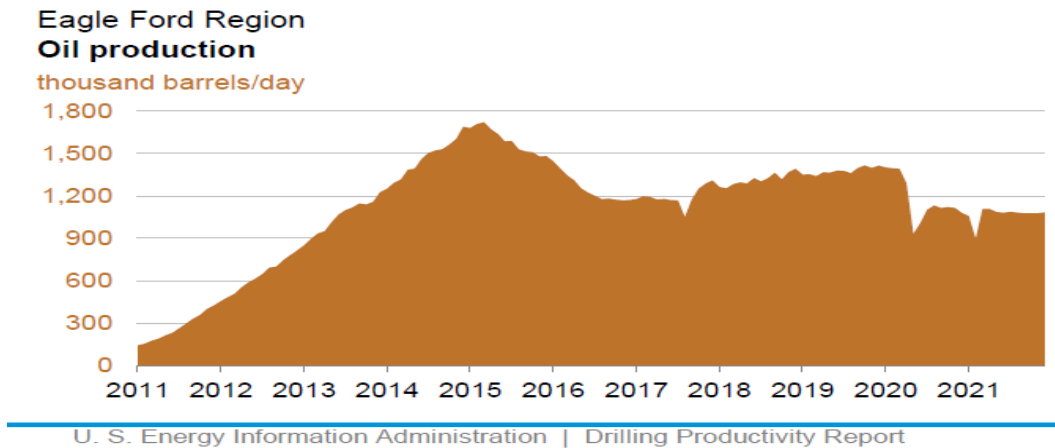
<sup>14</sup> As explained in footnote 11, there is often some associated gas (natural gas and natural gas liquids (such as propane)) as a byproduct of crude oil production. Higher prices for associated gas incentivize increased crude production and exports, but crude oil prices are typically a more important driver for crude production and exports. Since the FEIS was prepared in 2018-2019, there has also been a tremendous increase in US prices for natural gas and natural gas liquids. In 2020, the early COVID shock resulted in substantial price drops for associated gas. In 2021, US prices for associated gas have dramatically increased and recently reached their highest levels since 2014 (or earlier). Recent higher prices for crude and associated gas strongly incentivize growth in the Permian, the biggest US producer of crude and associated gas.

<sup>15</sup> See footnote 9.

Eagle Ford and the Bakken in North Dakota were early centers of crude oil production from shale. From 2011 to 2015 (prior to lifting of the crude export ban), output increased rapidly in both regions:

- Eagle Ford by about 1.5 MMbbl/day (as shown in Figure 5)
- Bakken by almost 1 MMbbl/day.

Figure 5: Eagle Ford Region Oil Production (2011-2021)



Source: U.S. Energy Information Administration, <https://www.eia.gov/petroleum/drilling/archive/2021/11/pdf/dpr-full.pdf> p. 6.<sup>16</sup>

This rapid increase in crude oil production from shale was driven by a combination of factors, notably:

- improved production technologies (horizontal drilling and hydraulic fracturing (“fracking”))
- high crude oil prices (around \$100/bbl from 2011 until late 2014) (see Figure 2).

As shown in Figure 2, crude prices crashed in late 2014 and then stayed lower for longer:

- around \$30-\$50/bbl from 2015 until late 2017;
- then increasing to around \$50-\$70/bbl from late 2017 until early 2020 (the period leading up to COVID).

Figure 5 shows that in response to evolving crude oil prices, Eagle Ford output:

<sup>16</sup> Figure 5 for Eagle Ford has been reproduced from the source with scaling adjusted to decrease height, so that its vertical scale is more similar to the vertical scale in Figure 4 for the Permian. Production of 1 MMbbl/day is ~7/16” high in Figure 4 and ~12/16” high in Figure 5.

- declined by about 500,000 bbl/day from 2015 until 2017;
- then increased by about 200,000 bbl/day from 2017 until early 2020 (the period leading up to COVID).

As demonstrated by the preceding analysis, the big growth engine for US crude production and exports has been the Permian, rather than Eagle Ford. Output from Eagle Ford did somewhat rebound in the period leading up to COVID. But in late 2019 to early 2020, Eagle Ford output was still about 300,000 bbl/day below peak output in 2015 (prior to lifting of crude export ban).

Nonetheless, in the context of the FEIS analysis of crude exports via the Port, output from Eagle Ford was potentially more significant, given that:

- FEIS projections for crude exports via the Port were relatively small (65,000-70,000 bbl/day), compared with Eagle Ford output of about 1.3 MMbbl/day in 2018;
- Eagle Ford output was increasing in 2018-2019 (when the FEIS was being prepared); and
- compared with the Permian, Eagle Ford is more proximate to the Port, with portions highly proximate.

As concluded in Section 3.2, the FEIS focus on Eagle Ford is no longer valid given:

- the dramatic increase in crude exports now estimated by Max Midstream
- significant changes in US crude market context since the FEIS
- that the bulk of US crude exports have come from the Permian Basin and this is likely to continue as the US and global economies recover from recent disruptions.

More specifically, as shown in Figure 4 and Figure 5:

- Eagle Ford cannot practically supply all or even most of the crude exports projected by Max Midstream; some and likely most of these exports would be from the Permian;
- Max Midstream projections for crude exports via the Port are very large (650,000 bbl/day);
- Eagle Ford output is now stable at about 1.1 MMbbl/day;
- Permian output is now about 4.9 MMbbl/day and rapidly growing, with geological and economic potential for substantial future growth in output;
- Max Midstream (on its website and other communications) consistently states that its crude exports would be from the Permian Basin, as well as Eagle Ford.

In light of the above, in the current crude market context, an SEIS is required and must focus on the Permian Basin as a key driver for crude exports enabled by MSCIP.