February 18th, 2021

Brett Walker, Planner bwalker@novato.org City of Novato 922 Machin Street Novato, CA 94945



Protecting Marin Since 1934

Re: Costco Fuel Facility IS/MND

Dear Mr. Walker:

The Marin Conservation League has reviewed the Initial Study/Mitigated Negative Declaration (IS/MND) for the proposed Costco Fuel Facility at Vintage Oaks and continues to oppose this huge addition to Novato's carbon footprint. The IS/MND did not provide adequate information to convince us that it is safe, necessary or beneficial.

When Vintage Oaks had its original environmental review, the pads for satellite buildings were identified and there was analysis of each site. The location of the fuel facility was not identified as a pad for a satellite structure. The Mitigated Negative Declaration did not perform the kind of subterranean analysis as was done for the originally identified pads. Burying three 40,000-gallon tanks for the gasoline, plus the concrete slab for them to be strapped to, is a lot of weight on unknown fill material resting on Bay mud, which the MND identifies as being subject to liquefaction. There needs to be an amendment to the Vintage Oak Master Plan and more specific information about the site proposed for the fuel facility.

The IS/MND falls short in addressing some of the issues of potential impact. Although the Beverly Ehreth Ecological Pond wildlife area was identified as being 150 feet from the project site, it was pretty much ignored when addressing specifics, such as noise and vibration, air quality, and nesting birds.

Hydrology and Water Quality did not address the elevation of the site and potential impact of Sea Level Rise (SLR). While the improbability of a seiche affecting the site, the document did not discuss Novato Creek (a tidal creek), SLR, the underlayer of bay mud and potential of subsidence and flooding from other sources. The document acknowledges that liquefaction is probable. The rising water table from SLR is not addressed and should be. The water table is 3 to 10 feet at this time. Is the groundwater fresh or saline? **Attachment #1** illustrates future water levels with SRL.

Geology and Soils section recognized the high potential for liquefaction in at least part of the site during an earthquake and yet it is not considered any higher risk than "Less than Significant"! This is a site with relatively unknown substrate on which they propose to put 3 storage tanks each holding 40,000 gallons of gasoline on an 8 inch thick slab of concrete, in total weighing approximately 360 tons! With sumps, flexible connections, monitors and alarms there would be no quick fix in an earthquake and the Beverly Ehreth Pond, 150 feet away at a lower elevation, could be damaged for years.

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The Land Use and Planning section claims consistency with the recently adopted General Plan 2035, but the only positive reference had to do with solid waste disposal, which was passed off to the main Costco store. The General Plan 2035 goes to some length to encourage and promote electric vehicles, reducing greenhouse gases (GHGs), increasing electric infrastructure, using renewable energy. There is nothing to remotely infer that building a mega fossil fuel facility is consistent with this future vision.

Transportation on pages 93-94, finds that the project would have a less than significant impact with respect to conflicting with or being inconsistent with California Environmental Quality Act (CEQA) Guidelines section 15064.3(b). This finding is based on an analysis of Vehicle Miles Traveled (VMT) prepared by Kittelson & Associates, Inc., December 2020, which is part of the IS/MND's Appendix TIS, Transportation Impact Study.

The VMT analysis relies on five types of vehicle trips associated with the proposed Costco fuel station to determine net daily VMT that would be generated: net new gas-only trips, gas-only diverted trips, gas-only pass-by trips from the shopping center, new warehouse and gas (shared) trips, warehouse and gas trips shifting to Novato from existing Costco warehouses with fuel stations. This analysis finds that the Costco fuel station would reduce total regional daily VMT by 458. This analysis overestimates vehicle trip reductions and underestimates vehicle trip generation based on several unsupported assumptions and incorrect methodology: **See attachment #2.**

Air Quality impacts are discussed only in relationship to the nearest residential neighborhood which is on the west side of the Highway 101 freeway from the project. There is habitat within 150 feet from the project in which nesting birds, aquatic birds and mammals live. This may not be a 'sensitive receptor' in the Bay Area Air Quality Management District (BAAQMD) definition, but impacting this mitigation site with harmful air quality defeats the purpose of mitigation. The impacts to this sensitive site must be addressed.

In addressing GHG emissions, the IS/MND references the General Plan PF-3c focusing on water and other efficiencies, instead of pointing out that the Greenhouse Gas Reduction Measures listed in GP appendix E include 30 targeted areas to reduce GHGs, including #15 vehicle idling and #17 low emission vehicle infrastructure. The proposed project would comply with neither of these. Neither does it honor Novato's Climate Emergency Resolution adopted on November 10, 2020.

The Marin Conservation League does not find the IS/MND did an adequate job of evaluating the real impacts of the proposed Costco Fuel Facility. Nothing should be approved until the soils, water-table and stability of the site are determined.

Sincerely,

Robert Miller President

Part Miller

Susan Stompe Chair, Land Use,

Transportation and Water

Committee

Doug Wilson

Chair, Climate Action

Working Group

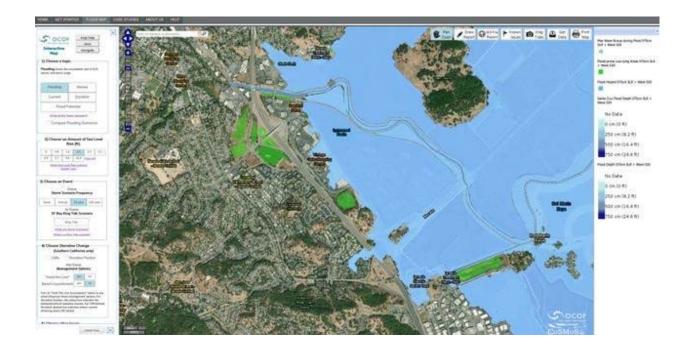
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Attachments: 1 and 2

Attachment #1

Sea Level Rise – Source: Our Coast, Our Future Flood Map

Much of site will be inundated by 2.5 feet of SLR by 2070 per the majority of climate expert projections of future SLR ranges including 20-year storm events



Attachment #2

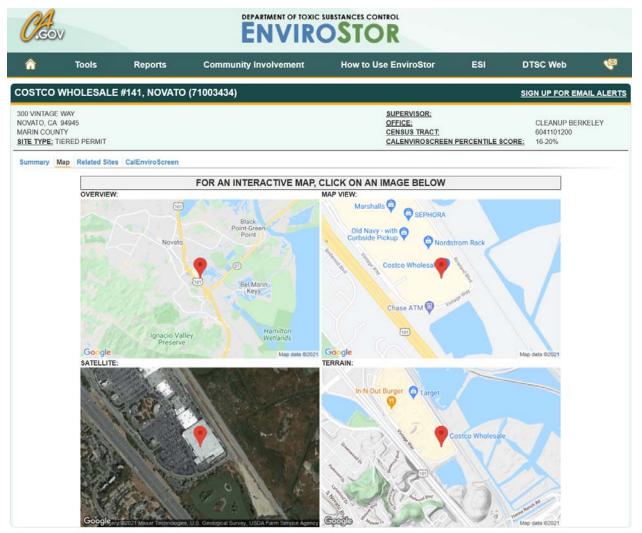
Review of Initial Study/Mitigated Negative Declaration prepared by City of Novato, January 2012 for Costco Fuel Center and Rowland Boulevard Public Works Project

1. Hazards and Hazardous Materials

The IS/MND finds that the new Costco fuel station would have a less than significant impact with respect to creating a significant impact to the public or the environment as a result of being located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5, The IS/MND states that "The fuel center site is listed as Costco Wholesale #141, Novato (ID: 71003434), an inactive site on the EnviroStor database," which appears to imply that there is nothing to worry about. However, this statement omits the full text of the EnviroStor database entry for the Costco Wholesale warehouse cleanup status, which reads: "inactive – needs evaluation as of," as shown below.



https://www.envirostor.dtsc.ca.gov/public/profile report?global id=71003434



https://www.envirostor.dtsc.ca.gov/public/profile report?global id=71003434

The EnviroStor glossary (https://www.envirostor.dtsc.ca.gov/public/EnviroStor%20Glossary.pdf) defines the cleanup status "Inactive – Needs Evaluation" as an identifier for non-active sites where the Department of Toxic Substances Control (DTSC) has determined that a Preliminary Endangerment Assessment (PEA) or other evaluation is required. In other words, the DTSC has not yet assessed the site and entered findings or referrals to other agencies into the EnviroStor database. Therefore, the IS/MND's finding of "less than significant impact" with respect to hazards and hazardous materials is not supported.

2. Transportation

The IS/MND, pages 93-94, finds that the project would have a less than significant impact with respect to conflicting with or being inconsistent with CEQA Guidelines section 15064.3(b). This finding is based on an analysis of Vehicle Miles Traveled (VMT) prepared by Kittelson & Associates, Inc., December 2020, which is part of the IS/MND's Appendix TIS, Transportation Impact Study.

The VMT analysis relies on five types of vehicle trips associated with the proposed Costco fuel station to determine net daily VMT that would be generated: net new gas-only trips, gas-only diverted trips, gas-only

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pass-by trips from the shopping center, new warehouse and gas (shared) trips, warehouse and gas trips shifting to Novato from existing Costco warehouses with fuel stations. This analysis finds that the Costco fuel station would reduce total regional daily VMT by 458.

Table 20: Overall Project VMT

Trip Type	Total Daily VMT
Net New Gas-Only Trips	-409
Gas-Only Diverted Trips	2,633
Gas-Only Pass-By Trips from Shopping Center	414
Warehouse + Gas Trips	-1,496
Warehouse + Gas Trips: 30% Shifting from Existing Warehouses	-1,600
Total	-458

Source: Kittelson & Associates, Inc. 2020

This analysis overestimates vehicle trip reductions and underestimates vehicle trip generation based on several unsupported assumptions and incorrect methodology:

a) Net new gas-only trips

The VMT analysis calculates a reduction of 409 daily VMT for net new gas-only trips (trips whose destination is the new Costco fuel station but not the warehouse):

Table 15: VMT for Net New Gas-Only Trips

Gas-Only Trips by Fuel Station Destination	Daily Trips	Daily VMT
Gas-Only Trips Currently Made to Members' Closest Fuel Station*	1.405	1,781
Gas-Only Trips to Novato Costco Gas Station	1,403	1,372
Total	-409	

Source: Kittelson & Associates, Inc., 2020

This analysis assumes that at present, Costco members make 1,405 daily gas-only trips to the fuel station closest to their home, driving an average of 1.27 miles per trip (=1,781 daily VMT/1,405 daily trips), and make gas-only trips only if a fuel station is within three miles (about 10 minutes) of their home. The VMT analysis further assumes that in the future, Costco members who live within three miles of the Vintage Oaks shopping center will make 1,405 daily gas-only trips to the new Costco fuel station, driving an average of 0.98 miles per trip (1,372 daily VMT/1,405 daily trips).

The VMT analysis does not explain how it arrived at the assumption that Costco members make 1,405 daily trips to fuel stations nor does it explain how it arrived at the assumed miles per gas-only trip to calculate daily VMT. The assumption that the daily gas-only mileage is higher at present than it will be when the Costco fuel station is built is counter-intuitive: it seems more likely that Costco members will drive further to

^{*}Members who would make gas-only trips to the Costco fuel station in the future when it is in operation currently buy their gas somewhere. This line assumes members purchase gas today at the fuel station closest to their home.

purchase less-expensive fuel at a Costco fuel station than they do at present to closer but more expensive fuel stations.

b) Gas-only pass-by trips from shopping center

The VMT analysis assumes that 1,655 Costco members who shop (or eat) elsewhere at the Vintage Oaks shopping center will use the new Costco fuel station on a daily basis without accessing the Costco warehouse, assuming an additional average onsite distance of 0.25 miles:

Table 17: VMT for Pass-by Trips from Shopping Center

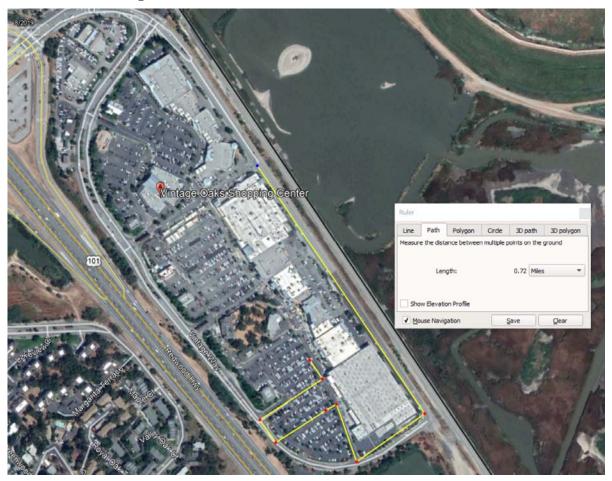
Daily Gas-Only Pass-by Trips	Average Distance per Trip	Daily VMT
1,655	0.25	414

Source: Kittelson & Associates, Inc. 2020

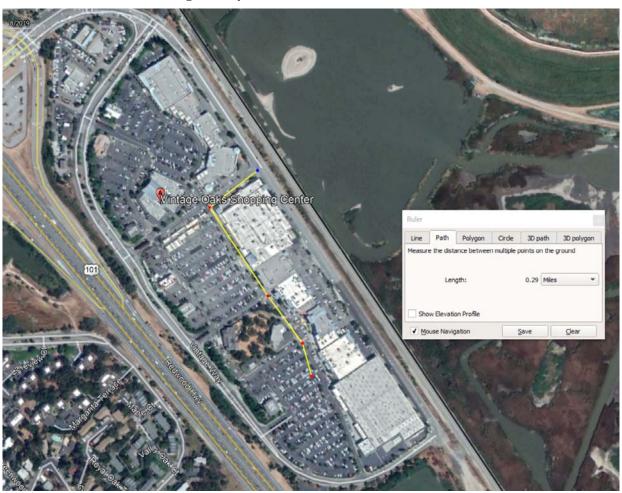
Again, the VMT analysis does not provide support for the assumptions to calculate daily VMT and the assumption of an average of 0.25 miles on site is too low.

Using Google Earth, the additional mileage to the same exit point for the nearest store next to the Costco warehouse is about 0.4 miles (0.72 miles accessing the fuel station - 0.29 miles without accessing fuel station):

Accessing new Costco fuel station from store nearest Costco warehouse

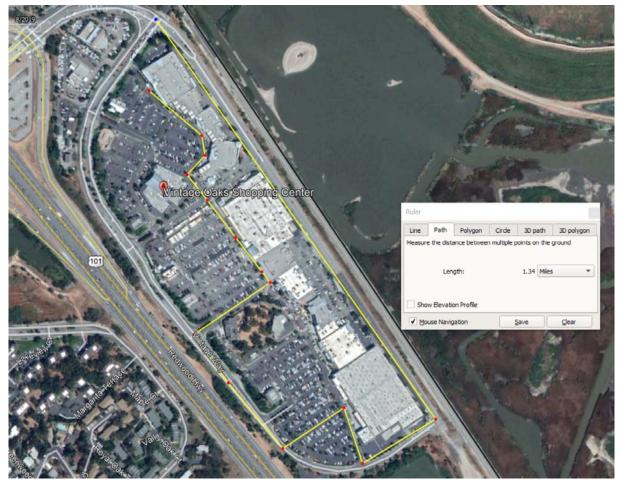


Leaving directly from store nearest Costco warehouse



The additional mileage to the same exit point for the other end of the Vintage Oaks shopping mall is about 1.1 miles (1.34 miles accessing the fuel station - 0.22 miles without accessing fuel station):

Accessing new Costco fuel station from north end of Vintage Oaks shopping center



Winting or Oaks Singipping Canter Ruler Line Path Polygon Crick 30 path 30 polygon Measure the distance between multiple points on the ground Length: 0.22 Miles Show Bevalon Profile P Bouse Navigation Sarre Clear

Leaving directly from north end of Vintage Oaks shopping center

As shown, additional onsite trip lengths accessing the new Costco fuel station vary between 0.4 and 1.1 miles. Therefore, the VMT analysis greatly underestimates additional daily VMT from gas-only pass-by trips from within the Vintage Oaks shopping center by assuming that each trip on average would only be 0.25 miles long.

c) Warehouse and gas trips shifting to Novato from existing Costco warehouses with fuel stations

The VMT analysis states that Costco members combining their trips to the Costco warehouse with fueling up at the new Costco fuel station (instead of buying gas elsewhere) would yield a VMT credit because members would combine two trips into one. To calculate this reduction, the VMT analysis relies on the ratio of gasonly diverted trips, pass-by trips, and primary trips relative to gas-only trips based on data for the PM peak hour:

Table 18: VMT for Warehouse + Gas Trips

Present-Day Trip Type	Percentage of Warehouse + Gas Trips	Number of Daily Warehouse + Gas Trips	Average Miles to Existing Fuel Station	Daily VMT
Divert to Existing Fuel Stations	36%	810	0.78	-629
Pass-by to Existing Fuel Stations	34%	757	0	0
Home-Based Trips to Existing Fuel Stations	30%	684	*	-867
Total		2,250		-1,496

Source: Kittelson & Associates, Inc. 2020

This analysis again relies on unsupported data for the number of daily warehouse trips + gas trips and average miles to existing fuel stations. In addition, the ratio of trips derived based on PM peak hour data appears unsuited to calculate a reduction in daily VMT. Also, the VMT analysis appears to double-count the home-based trips to existing fuel stations it analyzed earlier as "gas-only trips."

d) VMT credit for shifting from existing Costco fuel stations in region

The VMT analysis assumes that some Costco members living in Marin County, who currently make regional trips to fuel up at the Rohnert Park and Vallejo Costco locations will instead fuel up at the new Costco fuel station in Novato, resulting in shorter trips and a VMT credit. The VMT analysis assumes that 30% of these regional trips currently occurring at the Rohnert Park and Vallejo locations are home-based (gas-only trips), based on Table 7 in the Transportation Impact Analysis (Appx. TIA), which summarizes trip generation estimates by trip type. The VMT analysis then multiplies the resulting average daily regional fuel trips by a range of roundtrip distances traveled to determine the daily VMT credit:

Table 19: VMT for Warehouse + Gas Trips: 30% Shifting from Existing Warehouses

Existing Warehouse	Average Daily Regional Fuel Trips*	30% of Average Daily Regional Fuel Trips	Range of Roundtrip Distances Traveled (mi.)	Daily VMT
Rohnert Park	119	36	6-43	-1,356
Vallejo	21	6	24-46	-244
Total	140	42		-1,600

Source: Kittelson & Associates, Inc. 2020

This analysis is based on a number of wrong assumptions:

1) The mere fact that Marin County Costco members fuel up at the Rohnert Park and Vallejo locations without shopping at the Costco warehouses at these locations does not indicate that they make home-based (gas-only) trips to fuel up. Instead, they may be shopping at the respective malls or are on their way somewhere else.

^{*} Average distance not applied to home-based trips. Calculation uses spatial analysis to assign home-based trips along the shortest route to the nearest fuel station.

^{*} Based on Costco fuel station transaction data for Vallejo and Rohnert Park in April 2019.

2) Even if the above assumption were correct, the VMT analysis incorrectly relies on the PM peak hour percentage from Table 18 to arrive at 30% home-based trips. Instead, Table 7 shows that over the course of the entire day only 20.45% are home-based trips (= 1,405 net new gas only trips / 6,870 total trips):

Table 7: Trip Generation Estimates by Trip Type

Costco Gasoline Fuel Station	Daily Trips	Weekday PM Peak Hour Trips	Saturday Midday Peak Hour Trips
Total Trips	6,870	576	696
Warehouse + Gas Trips (33% Weekday, 36% Saturday)	-2,250	-189	-250
Total Gas-Only Trips	4,620	387	446
Pass-by Trips (36% Weekday, 30% Saturday)	-1,655	-139	-133
Diverted Trips (34% Weekday, 32% Saturday)	-1,560	-131	-141
Net New Gas-Only Trips	1,405	117	172

Source: Kittelson & Associates, Inc. 2020

Note: Percentages of warehouse + gas "shared" trips, gas-only pass-by trips, and gas-only diverted trips are estimated based on historical data from the Costco trip generation database.

3) To calculate daily VMT, the VMT analysis assumed average roundtrip distances for Rohnert Park of 37.7 miles (= 1,356 daily VMT/36 trips) and for Vallejo of 40.7 miles (= 244 daily VMT/6 trips). No one drives 40 miles roundtrip to fuel up (especially not in Bay Area traffic)! Not only does driving 40 miles and fueling up at a busy fuel station probably take the better part of an hour or longer, but the fuel used by the vehicle to get to the fuel station and back home would eliminate the cost savings. The VMT analysis recognizes this when it analyzed the home-based fuel trips, which it cut off at 3 miles.

e) VMT increase from additional members driving to new Costco Novato fuel station

The VMT analysis does not account for current non-members, including some who already frequent the Vintage Oaks Shopping Center, who may sign up for a new Costco membership because of the savings at the new Costco Novato fuel station. Plenty of discussions can be found online where people contemplate getting a membership for fuel purchases alone (for example:

https://www.reddit.com/r/Costco/comments/b36ctg/getting_the_membership_just_for_gas_worth_it/).