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MTC-ABAG Plan Bay Area Public Comment
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Re: Public Comment on Draft Plan Bay Area and Draft Plan Bay Area Draft Environmental Impact Report

This letter is submitted as public comment on the Draft Plan Bay Area and Draft Plan Bay Area Draft Environmental Impact Report (State Clearinghouse No. 2012062029).

I was born in San Francisco and moved to Tamalpais Valley in Unincorporated Marin where I have raised my family and lived for the last 44 years. I am a retired professional in Early Childhood Development and Parent Education. I have been involved with community affairs since 1977 with my husband who was Co-chair of the Preserve Tam Valley Committee and an elected member of the Tamalpais Community Services District Board for 14 years. He served on the Advisory Committee of the Richardson Bay Special Area Plan (1984). He was appointed by the Marin County Board of Supervisors as a member-at-large with focus on open space to the Tamalpais Area Community Planning Committee from 1986 - 1992 and an appointed member of the Gateway Planning Committee since 2004 when established as as an advisory committee to Marin County Supervisor Charles McGlashan. Both of us have been involved as members of the Tam/Almonte Task Force, providing input regarding impacts based on our knowledge of the Tamalpais Planning Area as the 2007 Countywide EIR and Plan was being developed. Since 2011 we have been working on the Tam Valley Community Plan Update Committee established by Supervisor McGlashan. As Board members of Sustainable Tam Almonte we have reviewed and commented on the Marin 2012 Draft Marin County Housing Element and its Draft Supplemental Environmental Impact Report (DSEIR). I was appointed by the Marin County Board of Supervisors in 2011 to the Health Council of Marin and have been President of the Health Council since 2012.

## I. Impact Assessment:

1. *Projects taking advantage of CEQA Streamlining provisions of SB 375 must apply the mitigation measures described, as feasible, to address site-specific conditions. To the extent that an individual project adopts and implements all feasible mitigation measures described, the impact would be less than significant with mitigation (LS-M).*

*MTC/ABAG cannot require local implementing agencies to adopt the mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore it cannot be ensured that this mitigation measure would be implemented in all cases, and this impact remains significant and unavoidable (SU)*

2. Following the review of environmental issues the following statements italicized above are repeated which essentially state :

- that the conclusions from the Plan's EIR review are subject to site-specific feasibility
- such site-specific feasibility cannot be assessed by a program EIR such as this
- CEQA streamlining provisions of SB375 allow 'suggested mitigations' to reduce significance and ease environmental review
- however, MTC/ABAG cannot require and is not responsible for the mitigation measures
- there is no assurance whether or what mitigation will be determined or implemented by lead agency in specific cases or what will be understood when review is limited

"Section 15151 of the *State CEQA Guidelines* states that an EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences." However, the analysis in this DEIR lacks sufficient analysis to make "intelligent" and well-informed land use decisions, some of them irreversible and many significant and adverse, affecting people, other species and the sustainability of the environment for many decades to come.

**Conclusions cannot be made** based on the above **impact assessment as to whether environmental impacts are less than significant or significant and unavoidable.** The Plan Bay Area's DEIR is inadequate and cannot be relied on to approve the Project.

**To define pollution areas by highways which are mislabeled on illustrative maps raises questions regarding the validity of other information. This is particularly significant as the purpose of an EIR is to adequately disclose, analyze and mitigate potentially significant health impacts. There could be no benefit from implementation of Plan Bay Area that would override thirty-nine significant unavoidable adverse environmental impacts which could result in severe environmental harm and serious illness, injury and loss of life.**

**The DEIR's conclusions are not supported by substantial evidence.** Analysis is inadequate due to the fact that **an EIR must include mitigations that can be evaluated NOW as to whether or not they have merit.** To propose to study, develop sea level rise scenarios or develop a plan in the future does not legally constitute mitigation. **CEQA is not meant to be a post hoc rationalization of decisions that have already been made.** Future analysis defers the public and planner's ability to ascertain whether or not and where feasible mitigations will exist to affect the extent of the impacts and therefore is insufficient. An example is the insufficient 'mitigation' of sea level rise.

## II. Impact Significance Criteria :

1. Impacts of the environment on a project or plan (as opposed to impacts of a project or plan on the environment) are beyond the scope of required CEQA review. "**[T]he purpose of an EIR is to identify the significant effects of a project on the environment, not the significant effects of the environment on the project."**

2. **The above statement illustrates a fundamental flaw in this planning process, EIR and CEQA review.**

If decision-making is to depend solely on information about the project or Plan's impact on the environment then we can't fully consider the impacts based on our interconnection/interdependence with that very environment. An example would be merely reviewing a building's impact on sea level rise rather than considering sea level rise's impact on a building and its residents.

Another example of this disconnect is that the effects on people and property of seismic occurrences due to preexisting environmental hazards can not be analyzed in this EIR even though proposed development may be located in high seismic risk areas.

**This makes such planning susceptible to unintended consequences.**

**3. SB 375 amended the California Environmental Quality Act (Pub. Resources Code § 21000 et seq.) to ease environmental review of specific types of developments that are anticipated to reduce emissions. This would suggest that such review is not necessary although the other deleterious environmental impacts may be less speculative and more significant!**

## III. Implementation of PDA selection without assessment and public input.

**1. To not distinguish the difference between 'potential' and 'priority' PDA's beyond the level of completion of the planning makes the assessment and decision-making regarding the appropriateness of PDAs selection unclear.**

**2. Priority Development Areas (PDAs)** are nominated by local jurisdictions supposedly as **appropriate places to concentrate future growth.** As a result of this focused growth, under the proposed Plan about 99 percent of new housing would be **within the region's existing urban footprint.** Local jurisdictions have chosen a Place Type for each PDA (such as transit neighborhood), which provides a **general set of guidelines for the character, scale, and density of future growth and best matches the community vision for the area.**

**3. The PROBLEM with this approach is :**

- **that areas were nominated which were not appropriate such as in Almonte Tamalpais Valley in Marin and the 26% of PDAs in the C.A.R.E. communities in the Bay Area sited in the Pacific Institute 'Crossroads' Report**
- **that areas have been nominated which will increase social injustice and health disparities**
- **that areas have been nominated that should be buffer zones between TACs and residential development.**
- **that areas are targeted which are semi-rural, not urban, and are being forced into urbanization inconsistent with their character, scale, density, community vision, public services and highly constrained conditions.**
- **that areas have been nominated without local community knowledge and input which target and incentivize development without prior consideration of a multitude of significant adverse unmmitigible impacts creating community stress, and wasted planning time at both public and private expense.**

**- that the PDA doesn't make a distinction in Marin between a'city-centered corridor' and a 'Highway 101 urban corridor'. The former would direct development into existing cities, an appropriate place for 'urban' development. The latter would suggest that semi-rural and rural areas *between cities* are 'urban' which they functionally and intentionally are *not.***

**- that funding needed for transportation such as public transit, bike lanes and road safety improvements in semi-rural areas (which is supported by all of our tax dollars ) would be unfairly denied unless these areas agree to convert to urban areas.**

## Environmental Issue Areas :

## IV. Transportation Impact - Significant and Unavoidable Adverse Impacts

As related to Almonte/Tamalpais Community PDA/TPP Area -

A. **Proposed Plan will cause increased per-trip travel time for commute and non-commute purposes, VMT and per-capita VMT** due to continuing service level F exacerbated by proposed increased population of residents having to travel outside our community for basic goods, services, schools and employment. **The Draft Plan Bay Area DEIR is insufficient because it fails to adequately analyze and mitigate Impact 2.1-3 on smaller busy highways with LOS "F".** With additional residential development precisely where the traffic is most obstructed and backed up, the LOS rating may only be considered F, i.e. the same by the EIR, because you have no G (growing worse) rating! This alone should advise against and eliminate proposed increased residential development.

B. **Insufficient public transit both on and beyond the 101 corridor make continued auto use necessary.**

C. **Public transit is also inadequate to serve 'tools of the trade' for many lower income occupations, thereby creating equity issues** based on assumptions of new housing limiting parking and/or adding additional costs for such beyond rent.

D. It is noteworthy that **"the proposed Plan assumes that in-commuting from outside the region will continue at 2010 levels".**

E. Open space resources serve residents from throughout the region, so park

acreage in Marin is actually serving residents throughout the region and **implementation of the proposed Plan would increase the number of residents traveling from and through our PDA to make use of existing parkland.**

F. **The congestion of this regional traffic combined with adjacent residents from Muir Beach, Muir Woods Park, and Mill Valley and local current and proposed community residents will create an unavoidable, significant, adverse impact,** especially when all must pass through our narrow valley.

G. The regional traffic referenced above is going to one of the world's largest urban national parks. Over 7 million people live within a 1-hour drive of GGNRA. The GGNRA is visited by about 17 million people each year from across the US and around the world. Muir Woods receives about 750,000 visitors annually through Tam Valley. Trips to GGNRA account for 50 percent of all visits to the 29 national parks in California. Muir Beach, and Muir Beach Overlook (with spectacular panoramic views in every direction) are 3 miles west of Muir Woods.

In addition, traffic destinations include Mount Tamalpais, Stinson Beach,Tennessee Valley, and Point Reyes National Seashore located along the west coast of Marin County approximately 30 miles north of the City of San Francisco. The Seashore draws visitors with both its shoreline and over 150 miles of hiking trails as well as attraction of Bolinas Ridge, Olema Valley and Tomales Bay. The Seashore averages over 2 million visitors each year who are drawn to the unique geography of the Point Reyes peninsula, the rich cultural and historic setting, and the dramatic natural environment, which is recognized locally, nationally, and globally as a center of biodiversity. As previously mentioned, the Seashore along with GGNRA, is part of the Golden Gate Biosphere Reserve designated by UNESCO as an area of global significance. **As such traffic is likely to continue to grow unavoidably, increases from additional housing will inevitably aggravate an already highly constrained condition and should not be allowed.**

## V. Air Quality Impact - Significant Unavoidable Adverse Impact

As related to Almonte/Tamalpais Community PDA/TPP Area -

**In general, the closer one gets to a source of emissions, the higher the pollutant concentrations one will be exposed to. Ideally, sensitive land uses would be set back an appropriate distance such that sensitive receptors would not be exposed to TAC and $PM_{2.5}$ concentrations that could adversely affect their health.**

**However, this is the CENTRAL ISSUE surrounding infill development, such as in TPPs and PDAs, where the objective is to locate jobs and housing in close proximity to each other to reduce automobile trips and therefore mobile source emissions. In doing so, sensitive receptors can be located too close to stationary or mobile sources and exposed to unhealthy levels of TACs and $PM_{2.5}$ concentrations!!!**

A. **The Proposed Plan conflicts with air quality plans due to proposed development with sensitive receptors within 500 ' of existing and increasing toxic air contaminants due to both mobile and stationary sources.** The ARB 2005 Air Quality and Land Use Handbook: A Community Health Perspective (Handbook) identifies the appropriate distances that sensitive receptors should be protected from these stationary and mobile sources including analysis within 1000' of source. For other stationary sources besides gas station and generators, where BAAQMD could not identify dispersion values, the cancer risk and PM2.5 concentrations for each source were assumed to be the same at the source and up to 1,000 feet from the source.

B. 2.2-22 BAAQMD estimated cancer risk and PM2.5 concentration data is for mobile sources located in and within 1,000 feet of TPP areas. Mobile sources include freeways (highways and high volume roadways) .

C. According to Geoffrey Hornek, an environmental air quality consultant who has evaluated the sites proposed in the Tamalpais/Almonte PDA, **all of the Tamalpais Junction sites are located within the zone of influence of a number of strong roadway and stationary TAC sources as identified in the BAAQMD's listings.** The current risk assessment is inadequate to assure that future residents of any housing units built on any of the Tamalpais Junction PDA sites would not be exposed to unacceptable TAC levels. Further, **there is no evidence that future, in--depth health risk assessments could assure that TAC exposures would meet BAAQMD standards.**

D. **There will be a net increase of emissions of criteria pollutants from on-road mobile sources due to the combination of increasing regional traffic** with more than a million recreational visitors a year going to Stinson Beach, Mount Tamalpais, Muir Woods, and the GGNRA in Tennessee Valley passing through our narrow valley.

E. **The convergence of major highways 1 and 101 next to the proposed development compounds the air quality impacts**, especially with insufficient public transit available.

F. **The Plan's pollution map identifying specific highways in our area is inaccurately labelled thereby making the screening data on specific highways questionable.** The identification of actual mobile and stationary sources and their significant adverse impacts are accurately illustrated in a site-specific document by Mr. Hornek, an air quality expert, submitted in comments on the DEIR of the proposed Marin County Housing Element 2012.

G. **The proposed Plan will create increased health disparities** to the extent that this PDA/TTP development is targeted for vulnerable populations, seniors, young children, pregnant mothers, individuals with compromised immune systems or low income residents.

H. **The Healthy and Safe Communities performance targets for 2040 Plan Bay Area (Table 1.2-2) which aim to reduce premature deaths from exposure to particulate emissions will not be evidenced in our PDA as there will not be reductions in our highly impacted area.**

I. **2.2-19 Local Pollutant Impact Analysis -**

**Serious adverse health impacts can result by locating sensitive receptors within close proximity to sources of TACs and PM2.5. The urbanized areas along these transit corridors typically contain a wide range of air pollution sources** including stationary and area sources (e.g., gas stations, manufacturing facilities, etc.) and mobile sources (e.g., cars, trucks, trains etc.) which generate TACs and PM2.5 that can create localized health risks to residents and other sensitive receptors from prolonged exposure to elevated concentrations.

J. **2.2-3 Significant and Unavoidable**

Implementation of the proposed **Plan could cause a net increase in emissions of PM10 from on-road mobile sources compared to existing conditions.** As shown in **Table 2.2-8, PM10 emissions from mobile sources would increase by 12 percent during the proposed Plan's timeframe compared to existing conditions. The higher levels of PM10 emissions in 2040 conditions are due to the fact that these emissions are strongly influenced by the 20 percent growth in VMT** (which

directly affects entrained roadway dust), with some contributions from tire and brake wear and exhaust.

K. **2.2-5 Significant and Unavoidable**

Implementation of the proposed **Plan could cause a localized net increase in sensitive receptors located in Transit Priority Project (TPP)** corridors where TACs or fine particulate matter (PM2.5) concentrations result in a cancer risk greater than 100/million or a concentration of PM2.5 greater than 0.8 μg/m3. Regarding Impact 2.2.5(a) and 2.2.5(b), the Draft EIR fails to accurately disclose the severity of the significant cumulative health risks to sensitive receptors on sites within the zone of influence of collective TACs and PM2.5 emissions from several significant sources. For instance, Unincorporated Mill Valley sites located in the Transit Priority Project (TPP) corridor and located in the Hwy 101 Corridor Priority Development Area of the Draft Plan Bay Area are simultaneously subject to TACs and PM2.5 emissions from three or four of the following sources: Hwy 101 (LOS "F"), Hwy 1 (LOS "F"), two Dry Cleaners, three Gas Stations and the County of Marin Crest Marin Pump Station Generator.

L. **2.2-6 Significant and Unavoidable**

Implementation of the proposed **Plan could result in a localized larger increase or smaller decrease of TACs and or PM2.5 emissions in disproportionally impacted communities compared to the remainder of the Bay Area communities. These communities already experience significant health disparities and environmental injustice.** The Pacific Institute study report indicated that almost half of the PDA areas in the CARE communities proposed for high density development are unhealthy and inappropriate for residential development. Non-residential buffer zones without additional TAC sources should be established there instead.

M. **The EIR states that it does not examine the effects on local or regional air quality from specific land use and transportation improvements in the proposed Plan. Without assessing the potential effects it can not plan for or provide assurances regarding the health of the population it will be impacting.**

N. **New research on the health effects of TACs and PM2.5 reinforces earlier findings regarding adverse health impacts on both respiratory and cardiovascular health but also a wider range of potential effects, such as diabetes, autism, cognitive functions in older adults, and oxidative damage to DNA. In addition, US EPA has not identified a level of TAC/ PM2.5 concentration where no**

**negative health effects are observed. Carcinogens are assumed to have no safe threshold below which health impacts would not occur.** Sources of TACs include industrial processes, commercial operations (e.g., gasoline stations and dry cleaners), and motor vehicle exhaust—particularly diesel-powered vehicles.The three most potent carcinogens come primarily from motor vehicles—diesel PM overall, and 1,3-butadiene and benzene as specific components of diesel PM. The remaining toxic air pollutants, such as hexavalent chromium and perchloroethylene, while not appearing to contribute as much to the overall risks, can present high risks to people living close to a source due to the highly localized concentration of TACs.

**Destroying people's health is significant and avoidable** but not by assuming vehicles will improve someday or people will live indoors with perpetually adequately maintained air filters. We cannot assume that development will not include residents who need to use the outdoors or major tree vegetation will grow in saline soil. As an early childhood development specialist I am concerned that multi-family housing should foster growth and development of young children by providing active and ready access to healthy outdoor space. Increased outdoor use and exercise is also essential to address the national public health obesity crisis.

With limited access to some of our communities, the truck routes which currently avoid residential neighborhoods will now be moving through new residential developments if the TPP proposed plan is implemented in contrast with recommendations of BMP. According to the Tamalpais Area Community Plan the highway and major road through Tamalpais Valley are a main truck route to Mill Valley and parts of West Marin.

**Overriding significant environmental impacts that cannot be feasibly avoided or substantially reduced through processes such as CEQA streamlining or exemption under SB375 and ignoring their adverse impacts is unsustainable and irresponsible and it doesn't make them less than significant to those impacted by them.** According to the EIR, MTC/ABAG cannot require or ensure that mitigation measures will be implemented and they indicate that there are site-specific conditions that preclude the reduction of impacts. **Avoiding such projects is the only sustainable alternative.**

## VI. Land Use and Housing Impact -

**A. Proposed development will increase the conversion of natural habitat prioritized for open space by the Tamalpais Area Community Plan** and **essential in the future for protection from sea level rise and inundation** as well as preservation of

wildlife habitat and affected migratory and endangered species. (See 'G' below)

B. **This Urban Plan is supposed to direct development into cities (City-Centered Corridor) rather than adversely impacting semi-rural community areas** which are supposed to be protected as part of the Baylands Corridor.

C. Regarding population growth - The **Plan projects 13% population growth** in Marin (32,914) representing growth of 11% in households which is equivalent to an additional city being placed in Marin with 38% of that growth targeted to go in PDAs (12,507 residents). **The State Department Of Finance projects a population growth of 3% (6,818 more people). This is a significant discrepancy. The Plan Bay Area and the DEIR should be revised to reflect realistic population growth based on DOF projections.**

D. **The assumption that there will be substantial job growth presumes business investments which are not identified or analyzed in the EIR . The assumption that if you build houses there will consequently be jobs is not a proven fact.** The projected growth of employed residents doesn't seem consistent with Marin's population which has an increasing percentage of seniors who will not be employed. As Marin County is the largest employer in Marin and its departments have already been expected to cut their budgets by 10% there is no reasonable expectation that there will be adequate increased funding available for additional jobs, i.e. personnel and services. **Many residents who can afford to live here are either self-employed, government employed or commuting to jobs outside Marin where jobs are more prevalent and offered at higher wages so the concept of jobs near housing is unlikely, especially in some of the PDA locations like Tamalpais Valley.** To the extent that existing commercial uses are reduced by mixed use or replaced by 100% housing projects there will actually be a loss of jobs.

E. It is noted that **affordable housing is the primary type of housing which is unavailable and needed** rather than more market-rate, particularly in Marin. However, **only 43% of the proposed housing in the Plan is for lower income residents and achieving it "assumes planning support, coordination of regulations, and increase in public funding" making this objective less likely to be attained.** There is no discussion of the impact on these new residents of escalating costs of living, declining wages, continuing unemployment and the inability of planners to create jobs all of which impact the affordability of housing. **EIR states that Plan does not alleviate the existing challenges of restricted housing supply or escalating housing costs.**

F. Impacts of Land Use Projects on Local Authority - According to the EIR the proposed Plan will only be implemented insofar as local jurisdictions adopt its policies and recommendations. This is misleading in that **local jurisdictions which perceive themselves dependent on the Plan's funding sources attempt to revise their policies to coincide in order to secure the funds (bribes). Therein they compromise their supposed independent local land use authority. Consistency with the 'Sustainable Community Strategy' is expected.**

G. **Impacts of Conversion to Land Use and Transportation Projects Significant and Unavoidable**

1. **Preservation of the environment reflects an understanding that we and other species are mutually interconnected and independent with our environment.** This is reflected in the land we have reserved for open space, agriculture and forests. These resources sustain us. The proposed Plan will potentially convert 2,022 acres of protected open space lands, 5,941 acres of agricultural land, of which 1,184 acres are identified as Prime or Unique Farmland or Farmland of Statewide Importance, 723 acres of Williamson Act lands, and 1,414 acres of forest land to urbanized land uses and transportation projects.

2. **Table 2.3-17 shows that in Marin there are 135 acres where proposed development overlaps with open space and 31 acres affected by transportation projects. Table 2.3-18 shows 255 acres of forest and timberland in Marin will be potentially affected by development which represents 19% of this impact in the 9 counties.**

3. **These losses represent depletion of resources and expansion of our ecological footprint which is not a sustainable future direction and negate community efforts to retain these areas. They also reflect no consideration of the impacts on other species for whom relocation to substitute habitats may not be feasible.**

## VII. Energy Impact -

As related to Almonte/Tamalpais Community PDA/TPP Area -

A. **Proposed plan will increase our local per capita energy use as more people will need to travel beyond our community** for basic needs, services, schools and employment. ( Elementary school is at capacity.)

B. **Increased traffic will make bicycle travel by young children more hazardous and therefore deter both biking and walking** which will increase auto use and energy impacts.

C. It is noteworthy that **"the proposed Plan assumes that in-commuting from outside the region will continue at 2010 levels" and regional recreational traffic with resulting GHG will increase with increased population.**

## VIII. Noise Impact -

A. **Proposed plan will increase proximity of sensitive receptors who use both indoor and outdoor spaces to noise levels that exceed acceptable thresholds.** Current health studies indicate that **excessive noise creates elevated cardiac risks for seniors, a targeted population for housing**, who will not be restricted to (or protected by) indoor living in insulated units. Residential and mixed-use development would potentially be constructed adjacent to high volume noisy transportation corridors which could have adverse impacts on these uses. **Mitigation measures, both indoor and outdoor would be necessary but MTC/ABAG can not require or ensure that these are possible or will occur. Ambient noise levels at the majority of sites in PDA in Tamalpais Valley exceed 55dB CNEL threshold as a result of traffic along local roadways.**

B. **There is also no consideration of the additive noise levels on PDA from adjacent heliport with frequent recreational flights by GGNRA tourists. The Helicopter Tours fly over the Marin Headlands, and other landmarks in the Golden Gate Recreation Area. The FAA allows the helicopter company up to 2,900 flights per year and the sea plane company there to fly up to 2,190 flights.** The assessment of commercial air tour operations on units of the national park system is different in many respects from other aviation assessments. Air tour aircraft operations differ from the average national air transportation system operations, occurring in most cases seasonally, and only during daylight hours thereby concentrating the occurrences of flights and noise impacts. Air tour aircraft are by nature flying low for sightseeing purposes, and in national parks are often operating relatively close to the ground in low ambient sound environments. These factors require specialized noise assessment. With millions of visitors wanting to experience the GGNRA, some of which by aircraft tours, the potential impacts of noise on adjacent development in concentrated periods of the day and year should be considered an adverse impact.

C. Review of the maps of PDAs and PCAs in Appendix C of the Jobs-Housing Connection Strategy reveals that, **generally, buffers are maintained between PDAs and PCAs.** San Francisco and Marin County are two places, however, where this is not the case. The southernmost PDA in Marin County is designated as a **Transit**

**Neighborhood PDA near Highway 101 and has two designated PCAs adjacent or proximate to it subject to existing traffic noise.**

D. There appears to be no recognition of the **impact of additional noise on the PCA from increased human activity** because it is already experiencing an existing adverse impact from proximity to the highway. There also seems to be no understanding of the **noise levels during construction due to the necessity of having to go down over 80' through bay mud to find bedrock** while attempting to secure a structure.

E. 2.6-2 **Significant and Unavoidable**

Implementation of the proposed Plan could result in **increased traffic volumes that could result in roadside noise levels that approach or exceed the FHWA Noise Abatement Criteria.**

F. 2.6-3 **Significant and Unavoidable**

**Implementation of the proposed Plan could result in increased noise exposure from transit sources that exceed FTA exposure thresholds.**

## IX. Geology and Seismicity - Potentially Significant

A. **Proposed plan would increase exposure of people and structures to the risk of property loss, injury, or death involving strong seismic ground shaking, effects of liquefaction, building on fill and bay mud, and projected inundation and sea level rise.** Over time, settlement of unconsolidated soils or soft compressible soils such as Bay Mud can also pose problems to facilities. creating substantial risks to life or property from on- or off-site landslide, lateral spreading, liquefaction, or collapse. In spite of mitigation suggested in the Bay Plan and the 2007 Marin Countywide Plan which might reduce adverse effects of mild-moderate seismic ground shaking, the risks from severe seismic ground shaking which is predicted remain a significant unavoidable project and cumulative impact.

B. The U.S. Geological Survey (USGS) Working Group on California Earthquake Probabilities has evaluated the probability of one or more earthquakes occurring in the Bay Area and concluded that **there is currently a 63 percent likelihood of a magnitude 6.7 or higher earthquake occurring in the Bay Area by 2037. The San Andreas and the Hayward faults are the two faults considered to have the highest probabilities of causing a significant seismic event in the Bay Area S.A. 7.9 and H. 7.1 Max. moment magnitude earthquake. The PDA in Tamalpais Valley is in close approximately of about 10 - 11 miles from these two faults.**

C. Strong ground movement from a major earthquake could affect the Bay Area during the next 30 years. Ground shaking may affect areas hundreds of miles distant from the earthquake's epicenter. The intensity of ground movement during an earthquake can vary depending on the overall magnitude, distance from the fault, focus of earthquake energy, and type of geologic material. **Liquefaction potential is highest in areas underlain by shallow groundwater and Bay fills, Bay Mud, and unconsolidated alluvium. Figure 2.7-2 illustrates liquefaction susceptibility in the Bay Area. The Liquefaction Map on page 555 does not reflect Tamalpais Valley's high liquefaction (or subsidence).**

D. Impact Significance Criteria (page 564)

**Impacts of the environment on a project or plan (as opposed to impacts of a project or plan on the environment) are beyond the scope of required CEQA review. "[T]he purpose of an EIR is to identify the significant effects of a project on the environment, not the significant effects of the environment on the project." To choose to intensify development in high seismic risk areas without EIR analysis of the significant effects of the environment shows no regard for the impacts of the environment on people and structures and illustrates illusions about our technological ability to manage and ignore the power of natural forces.**

E. **Implementation of the proposed Plan Bay Area would have a potentially significant adverse impact in Tam Valley PDA sites related to geology and seismicity based on the following -**

Criterion 2: Increase exposure of people or structures to the risk of property loss, injury, or death involving strong seismic ground shaking.

Criterion 3: Increase exposure of people or structures to the risk of property loss, injury, or death involving seismic-related ground failure including liquefaction.

Criterion 6: Locate projects on a geologic unit or soil that is unstable or that would become unstable as a result of the project; on expansive soils (high shrink-swell potential), as defined in Section 1803A of the 2010 California Building Code (the most recent version of the California Building Code); or on weak, unconsolidated soils, creating substantial risks to life or property from on- or off-site landslide, lateral spreading, liquefaction, or collapse.

F. According to this regional data, approximately **14 percent of all the PDA land area is located above deposits considered to have a very high potential for liquefaction, 12 percent with high potential, 37 percent moderate,** 18 percent low,

and 18 percent with very low potential. " Map 2-11 Liquefaction Susceptibility Hazards in the 2007 Marin Countywide Plan illustrates areas of deep fill on bay mud, which are subject to high risks of liquefaction (and subsidence). (See also MCP's EIR) Many of these high liquefaction areas are located within the Transit Priority

Project (TPP) corridor and the Hwy 101 Priority Development Area (PDA) of Plan Bay Area. Other land use projects outside of the PDAs in the Bay Plan are more widely dispersed and would be located in a range of differing liquefaction potential.

G. **The potential for adverse ground failure impacts related to land use changes from implementation of the proposed Plan at the regional and local level is considered potentially significant (PS).** The findings related to the impact of seismic-related ground failure, of the Marin Countywide Plan's EIR and the 2012 Draft Marin County Housing Element's SDEIR conflict with those of the Draft Plan Bay Area's DEIR indicating that even with mitigation the adverse potential impacts would remain significant, unavoidable and cumulative. The above SEIR states that "implementation of the mitigation policies and programs would not eliminate all structural damage, injuries, or death from seismic-related ground failures, especially for severe seismic events". We have an opportunity to avoid these by exercising the precautionary principle and not placing more residences in such hazardous areas within approximately 10 miles of 2 faults. Such areas include the Tamalpais area with landfill on top of bay mud with bedrock reached at depth of about 80-90 feet. It is already subject to subsidence, liquefaction and laterial displacement, conditions inappropriate and expensive for proposed housing development.

## X. Water Resources - Flood Hazards

A. Proposed plan would place structures within Tam Valley's 100-year flood hazard area which is currently subject to flooding and resultant traffic impediment. This area is also projected to become more constrained with projected sea level rise. See BCDC inundation map. The proposed Plan could increase the amount of housing in flood hazard areas in the region.

B. To reduce the significant impacts the EIR says that specific hydrology studies must be made to show compliance with laws and regulations related to development in the floodplain; however this **'mitigation' does not speak to the limitation or avoidance of development in such areas, i.e. only the 'how' but not the 'whether' nor does it speak to the jeopardy that such development adds to communities from loss of wetlands.**

C. The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program **which provides subsidized flood insurance to communities that comply with FEMA regulations to limit development in floodplains.** By **designating new PDAs in floodplains the Plan does NOT limit such development and eliminates flood insurance subsidy opportunities thereby both increasing people at risk and increasing the cost of housing for current residents.** Figure 2.8-3 identifies federally designated 100-year storm event flood hazard zones in the Bay Area.

D. The following two Executive Orders are consistent with Marin Countywide Plan which established the Baylands Corridor as an area for preservation and protection rather than development. **Part of the 101 Corridor PDA is located in this Baylands Corridor.**

1. Executive Order 11990 - Protection of Wetlands

This Executive Order is an overall wetlands policy for all agencies managing federal lands, sponsoring federal projects, or providing federal funds to state or local projects. **This Executive Order requires that when a construction project involves wetlands, a finding must be made by the federal agency that there is no practicable alternative to such construction. The practicable alternative is to avoid construction projects and protect wetlands so they can protect communities from sea level rise storm surge, king tides and flooding.**

2. Executive Order 11988 - Floodplain Management

Executive Order 11988 directs federal agencies to avoid to the extent practicable and feasible short- and long-term adverse impacts associated with the occupancy and modification of floodplains and to **avoid direct and indirect support of floodplain development wherever there is a practicable alternative. Further, this Executive Order requires the prevention of uneconomic, hazardous, or incompatible use of floodplains; protection and preservation of the natural and beneficial floodplain values**; and consistency with the standards and criteria of the National Flood Insurance Program (NFIP).

E. Within California, approximately 95 percent of the state's historic wetlands have been converted to other land uses. Wetlands in California had been reduced to only 450,000 acres. **The loss of wetlands has been pronounced in the Bay Area because of urban development, intense diking and as a result of mining.**

F. In accordance with Corps, EPA, USFWS, RWQCB, and CDFW guidelines, a goal of "no net loss" of wetland acreage and value is required, wherever possible, through avoidance of the resource. **It is possible to avoid development in areas that adversely impact and jeopardize wetlands.**

**G. 2.8-6: Impact - Implementation of the proposed Plan could increase rates and amounts of runoff** due to additional impervious surfaces, higher runoff values for cut-and-fill slopes, or alterations to drainage systems that could **cause potential flood hazards and effects on water quality.**

H. Because individual projects under the proposed Plan have the **potential to adversely affect capacity of existing drainage systems** at a project- specific level, these **impacts are considered potentially significant (PS).**

## XI. Sea Level Rise and Inundation :

A. 2.5-6 **Significant and unavoidable!**

**Implementation of the proposed Plan may result in a net increase in the number of people residing within areas regularly inundated by sea level rise by midcentury.**

B. 2.5-7

**Implementation of the proposed Plan may result in an increase in land use development within areas regularly inundated by sea level rise by midcentury.**

C. **According to the EIR, Bay Area employment within the PDAs and potentially inundated areas is projected to increase by 55% by 2040 and increase in the TPPs by 30% and the number of people employed throughout the S.F. Bay Area in inundated areas will increase by 30%** indicating also an increase in commercial and industrial development in these areas.

D. **Marin will see an increase in employment within PDAs of 15% within SLR zone, within TPPs 20%. Households within PDAs in SLR inundation zone will increase by 250% and LOW zone by 100% and within TPPs by 10%. This would put approximately almost new 2000 jobs and new 450 households at risk !**
Why would responsible planners consider and choose such a plan and presume there will be no significant consequences! This kind of audacity ignores reality at other people's peril.

E. **The Plan proposes to proceed with development when adaptation strategies, including planned retreat, have not yet been analyzed and climate**

**change and sea level rise issues have not been thoroughly investigated. The Precautionary Principle of avoidance of further shoreline development should be applied when such long-term knowledge is insufficient and existing knowledge indicates escalating risks.**

## XII. Biological Resources - Potentially Significant

A. **Proposed plan will potentially have an adverse effect on sensitive or endangered species, inhibit restoration of historic wetlands and preclude ability to allow for migration inland as sea level rises. Some of proposed development also** falls within wetland (WCA) or stream (SCA) conservation areas.

"This community has become a high priority community for both state and federal resource agencies. In its *Draft Recovery Plan for Tidal Marsh Ecosystems of Northern and Central California*, the USFWS has included Mill Valley's shoreline in the Central/South San Francisco Bay Recovery Unit. Major threats to these communities include climate change, habitat loss and degradation, and invasion by exotic species such as non-native cordgrass species. (Mill Valley General Plan Draft 2040)"

"The tidal-terrestrial transition zone (T-zone) occupies the gradient between the intertidal zone and terrestrial (i.e., levee faces, valleys, hillsides, alluvial fans, and bluffs) and/or fluvial (i.e., rivers and streams) environments. The T-zone provides a number of valuable ecosystem functions and services, and also serves as accommodation space for estuarine transgression and floodwater dispersal/storage as sea level rises in the future. The T-zone is also one of the most heavily impacted areas of the Bay ecosystem, and emerging plans call for the conservation and reconnection of a T-zone where tidal marshes and their terrestrial connections can be created or allowed to naturally evolve. " (http://www.sfei.org/TZone_SouthSFBay. Downloaded 5/13/2003)

"San Francisco Bay wetland managers are looking landward for ways to accommodate accelerated sea level rise due to climate change. A major concern is that sea level rise will drown existing tidal marshes except for a narrow ring of marshland between the Bay and the built environment. This would eliminate many of the Bay's ecological services, as well as many of the ecological connections to the terrestrial environment upon which these services depend. Emerging plans therefore call for the conservation and reconnection of a tidal-terrestrial transition zone (T-zone) where tidal marshes and their terrestrial connections can be created or allowed to naturally evolve." *An Assessment of*

*the South Bay Historical Tidal-Terrestrial Transition Zone* Erin Beller, Micha Salomon, Robin Grossinger • San Francisco Estuary Institute • Publication #693 • May 2013 produced for the U.S. Fish & Wildlife Service Coastal Program

When wetlands are defined in accordance with the federal definition, the wetlands themselves are "waters of the state." California Water Board - Draft Water Quality Control Policy for Wetland Area Protection and Dredged or fill Permitting. See 40 C.F.R. § 230.3(s)-(t) ("waters" include "wetlands"); Wat. Code, § 13050, subd. (e) (defining "waters of the state" more broadly than EPA defines "waters of the United States").

"Tidal marsh studies indicate that they are an important defense against sea level rise in vulnerable communities. "[T]he research forecasts that under faster sea-level rise rates, salt marshes could bury up to four times as much carbon as they do now." (United States Geological Survey 2012 *Salt Marshes May Slow Climate Warming . . . For A While* Categories: Ecosystems, Featured Posted on September 26, 2012 at 11:00 am. Last update 12:57 pm By: Catherine Puckett cpuckett@usgs.gov & Hannah Hamilton hhamilton@usgs.gov ).

Tidal marsh development depends upon healthy supplies of plant communities, nutrients and alluvial deposition. This would be immitigable and the negative and associative costs, to the environment and the community, of losing tidal marsh wetlands far exceeds benefits derived from the project.

Diverse Upland transition areas tidal-terrestrial transition zones (T zones) above wetlands, known as ecotones, would be absent without tidal marshes and would be impacted by sea level rise adversely should tidal marsh plant community accretion not keep pace with the rising sea level. Thus the project would ultimately make human communities more vulnerable to flooding, CO2 release into the atmosphere, pollutants, loss of biodiversity and resilience. The T transition zone and habitat would be lost. Tidal marsh vegetation community regimes, sediment deposition from creeks, fluvial geomorphologic evolution and habitats would be unable to adapt to projected sea level rise conditions. This would damage and potentially obliterate remnant Endangered Species Act protected Critical Habitat should this project go through. Examples of this are occurring today and documented in Bothin Marsh and Coyote Creek's Richardson Bay terminus during the King tides of 2012/2013 (San Francisco Estuary Partnership, California Coastal Commission)

Wetlands (tidal marshes) and their ecosystem services are protected from having no net loss and Federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.) (Clean Water Act) to protect wetlands and riparian areas for water quality goals. With impacts of sea level rise already manifesting, mitigation of wetland losses may only be possible through tidal marsh natural enhancements (such as the horizontal levee (the Bay Institute 2013) and inland migration. Storm water run off currently filtered by the tidal marshes will flow straight into the bay off further impermeable hardscaping and pollute the Bay waters further as a result of this project. The proposed plan will significantly impact the tidal marsh by preventing adaptation of the tidal marsh through natural processes rendering compliance immitigable." (Laura Chariton, MA Riparian Policy and Restoration)

Eelgrass beds in Richardson bay deprived of natural sediments and nutrients would be impacted. Eelgrass beds right off shore of the marshes are hatching grounds for keystone species of herring that support bird, fish and marine mammal populations.

Both Eelgrass beds and tidal marshes are considered important for habitat, food sources, biodiversity and carbon sequestration. Those significant functions would be significantly impacted by this project. Tidal marsh biodiversity and resilience would be lost from the disconnection of nutrient and natural sediment deposition. " Upland erosion and construction activities can increase sedimentation which can smother eelgrass. Shoreline structures built over the water prevent eelgrass from getting enough light for growth. Excessive nutrients can accelerate algae growth on eelgrass blades, blocking out light. Within San Francisco Estuary, Richardson Bay stands out as a particularly unique location for eelgrass restoration. It harbors the second largest extant eelgrass bed in the estuary, and plants with the most genetic diversity of six beds sampled. Further, a model of environmental conditions in the estuary has identified Richardson Bay as the area with the greatest area suitable for restoration (Merkel and Associates 2004). Hence, Richardson Bay is highly valued both for its existing eelgrass resources and its potential for restoration."(http://richardsonbay.audubon.org/all-about-eelgrass) http://sfep.sfei.org/our-projects/fish-and-wildlife-recovery/eelgrasshabitat/ (Laura Chariton, M.A. Riparian Policy and Restoration)

B. 2.9-1a - Impact

**Implementation of the proposed Plan could have a substantial adverse effect**, either directly or through habitat modifications, **on species identified as candidate, sensitive, or special-status** in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service and the National Audubon Society. "Impacted animals include steelhead, salt marsh harvest mouse, tide water goby, clapper rail, and Point Reyes bird's beak. Given the extensive list of species utilizing the subject property area it is advised to be certain that no other species is a candidate or listed species. The lessened observance of certain species would necessitate this comprehensive inquiry." (Laura Chariton, MA Riparian Policy and Restoration)

**Focused surveys to determine the locations and extent of special-status species populations have not been conducted in support of this programmatic EIR**; detailed and site-specific surveys are more appropriately conducted when project level detail is available. Analysis in this EIR therefore conservatively **assumes that special-status species would be present** within the impact footprint of regional growth/land use changes or a transportation project if the project is mapped as occurring within or transecting a known species occurrence.

C. **The PDA and adjacent area in Tamalpais Valley include acres which are home to known Federally and State listed endangered species such as the Pt. Reyes Bird's Beak plant, Salt Marsh Harvest Mouse, Tide Water Goby (*Eucyclogobiius newberryi*), Clapper Rail and listed threatened Steelhead ((*Oncorhynchus Mykiss*) and provides habitat for both a resident and Pacific Flyway migratory bird population as well as many other species. Development in or adjacent to this habitat will have significant unavoidable adverse impacts.**

"The San Francisco Bay estuary, though severely fragmented and modified, represents the largest extent of tidal marsh in the western United States. Projected sea-level rise of 0.3-1.5m poses further threat to several endemic tidal marsh species such as the salt marsh harvest mouse, California clapper rail, and California black rail that are listed as federally endangered or state threatened species." (USGS website, http://www.werc.usgs.gov/Project.aspx?ProjectID=88, downloaded 5/13/2003)

Until and unless it is determined that each species does not carry potentially new information regarding endangered species status comprehensive biological studies need to occur.

The listed migration corridor includes (125 Birds Species, 75 Species of Butterfly,). Under the National Audubon Society, Bothin Marsh is also listed as an Important Bird Area. Greater and Lesser Scaup, Bufflehead and Ruddy Duck also are found during the migration period. Hundreds of shorebirds, especially Western Sandpiper, utilize the exposed mudflats of Bothin Marsh and the greater Richardson Bay daily during migration. "Bothin Marsh, is managed by Marin County Open Space District. This wetland, along with the wetlands of Corte Madera, represents the majority of the tidal marsh habitat of west-central San Francisco Bay. The estuarine wetlands of San Francisco (which includes Richardson) and San Pablo Bays are recognized together as a Western Hemisphere Shorebird Reserve Network (WHSRN) Site of Hemispheric Importance for shorebirds - the highest possible ranking." (National Audubon Society website, http://netapp.audubon.org/iba/Site/148, downloaded5/14/2003)

The U.S. Fish and Wildlife Service (USFWS) calls for the recovery of several species that depend on tidal marsh, including salt marsh harvest mouse (*Reithrodontomys raviventris*), salt marsh wandering shrew (*Sorex vagrans halicoetes*), California clapper rail (*Rallus longirostris obsoletus*), California black rail (*Laterallus jamaicensis coturniculus*), San Francisco common yellowthroat (*Geothlypis trichas sinuosa*), Samuel's (San Pablo) song sparrow (*Melospiza melodia samuelis*), long-billed curlew (Numenius americanus), California sea-blite (*Suaeda californica*), and Pacific cordgrass (*Spartina foliosa*), green sturgeon (*Acipenser medirostris*) in Richardson Bay among others. In addition, the National Marine Fisheries Service (NMFS) has identified marsh habitat and its surrounding coastal waters as "essential fish habitat" and strives to protect this sensitive area for the fish species that depend on it for food and shelter.

Bothin Marsh Marin County Open Space area lists these species present that will be affected by environmental changes:

Bird Species:
Allen's Hummingbird, American Avocet American coot, American Crow American Kestrel, American Pipit, American White Pelican, American Wigeon, Anna's Hummingbird, Barn Owl, Barn Swallow, Barrow's Goldeneye, Belted kingfisher, Black Phoebe, Black Scoter, Black –bellied Plover, Black-crowned Night Heron, Black-necked Stilt, Blue winged Teal, Bonaparte's Gull, Brandts's cormorant, Brant, Brewer's Blackbirds, Brown Pelican, Brown-headed Cowbird, Bufflehead, Burrowing Owl, California Gull, Canada Goose, Canvasback, Caspian Tern, Cinnamon Teal, Clapper Rail, Clark's Grebe, Cliff Swallow, Common Goldeneye, Common Loon, Common Raven, Common Yellowthroat, Cooper's Hawk, Double –crested Cormorant, Dunlin, Eared Grebe, Eurasian Wigeon, European Starling, Forster's Tern, Gadwall, Glaucous-winged Gull, Golden-crowned Sparrow, Great Blue Heron, Great Egret, Greater Scaup, Greater White-fronted Goose, Greater yellowlegs, Green Heron, Green-winged Teal, Heermann's Gull, Herring Gull, Hooded Merganser, Horned Grebe, House Finch, House Sparrow, Killdeer, Least Sandpiper, Lesser Scaup, Lesser Yellowlegs, Lincoln's Sparrow, Loggerhead Shrike, Long-billed Curlew, Long-billed Dowitcher, Mallard, Marbled Godwit, Marsh Wren, Merlin, Mew Gull, Mourning dove, Northern Harrier, Northern Mockingbird, Northern Pintail, Northern Rough-winged Swallow, Northern Shoveler, Osprey, Pacific Loon, Peregrine Falcon, Pied-billed Grebe, Red Know, Red –breasted Merganser, Red-necked Grebe, Red-necked Phalarope, Red-tailed Hawk, Red –throated Loon, Red-winged Blackbird, Redhead, Ring-billed Gull, Ring-necked Duck, Rock Pigeon, Ruddy Duck, Ruddy Turnstone, Rufous Hummingbird, Sanderling, Savannah Sparrow, Say's Phoebe, Semi-palmated Plover, Semi-palmated Sandpiper, Sharp-shinned Hawk, Short-billed Dowitcher, Short-eared Owl, Snowy Egret, Song Sparrow, Sora, Surf Scoter, Tree Swallow, Turkey Vulture, Violet –green Swallow, Virginia Rail, Western Grebe, Western Gull, Western Meadowlark, Western Sandpiper, Whimbrel, White-crowned Sparrow, White–tailed Kite, White-throated Swift, White-winged Scoter, Willet

Butterfly Species:

Acmon Bue, American Lady, Anise Swallowtail, Arrowhead Blue, Blue Copper, Boisduval's Blue Bramble Hairstreak, Brown Elfin, Cabbage White, California Dogface, California Sister, California Tortoiseshell, Callioppe Fritillary, Checkered White, Cloudless Sulphur, common Branded Skipper, Common Buckeye, Common Checkered-Skipper, common Ringlet, common Sootywing,

common Wood-Nymph, Coronis Fritillary, Dotted Blue, Eastern Tailed-Blue, Edith's Checkerspot, Eufala Skipper, Field Crescent, Fiery Skipper Gorgon Copper Gray Haristreak, Great Basin Wood-Nymph, Great Purple Hairstreak, Gulf Fritillary, Hoary Comma, Large Marble, Marin Blue, Milbert's Tortoiseshell, Monarch, Mormon Metalmark, Mountain Mahogany Haristreak, Mournful Duskywing, Mourning Cloak, Mylitta Crescent, Northern Checkerspot, Northern Cloudywing, Orange Sulphur, Pacuvius Duskywing, Painted Lady, Pale Swallowtail, Persius Duskywing, Pipevine Swallowtail, Propertius Duskywing, Purplish Copper, Red Admiral, Rural Skipper, Sachem, Sandhill Skipper, Sara Orangetip, Satyr Comma, Silver-spotted Skipper, Silvery Blue, Small Checkered Skipper, Spring Azure, Sylvan Hairstreak, Tailed Copper, Two-tailed Swallowtail, Umber Skipper, Variable Checkerspot, West Coast Lady, Western Pine Elfin, Western Pygmy-Blue, Western Tailed-Blue, Western Tiger Swallowtail, Woodland Skipper

Mammals:

Big Brown Bat, Common Gray Fox, Harbor Seal, Black-tailed Jackrabbit, Little Brown Bat, Yuma Myotis (Bat) Salt Marsh Harvest Mouse, Northern River Otter, Striped Skunk, Raccoon, Opossum

Reptiles/ Amphibians – Pacific Tree Frog

Numerous Mollusks and Invertebrates

New sightings of Pacific Ocean Otters in the area need to also be considered.

Restoration of Oyster Beds and retention of Eel grass bed in the vicinity are critical.

D. **Potential regional effects on special-status species could occur as a result of habitat fragmentation, increased human intrusion into wildland areas, introduction of invasive species, disruption of migratory corridors, and a resulting regional reduction in biological diversity. Potential localized effects on special-status species include the temporary and permanent removal or conversion of vegetation and habitat necessary for species breeding, feeding, dispersal or sheltering. Because land use changes under the proposed Plan may result in adverse effects on special-status plants and wildlife at the regional level, these impacts are considered potentially**

**significant (PS). Listed affected species would include:** salt marsh harvest mouse, California clapper rail, Tidewater Goby, Pt. Reyes Bird Beak and Steelhead.

E. **Construction and/or ongoing operations could result in direct mortality of special-status plants and wildlife, entrapment in open trenches, and general disturbance "light pollution" due to noise or vibration during pile- driving, earthmoving, and other construction activities. Construction-generated fugitive dust accumulation on surrounding vegetation and construction-related erosion, runoff, and sedimentation could degrade the quality of adjacent vegetation communities, affecting their ability to support special- status plants and wildlife.** "Affected species would include:

Mammals: Big Brown Bat, Common Gray Fox, Harbor Seal, Black-tailed Jackrabbit, Little Brown Bat, Yuma Myotis (Bat) Salt Marsh Harvest Mouse, Northern River Otter, Striped Skunk, Raccoon, Opossum"

Fish – Steelhead, Tidewater Goby, pacific herring, bat rays, sculpin, three-spined stickleback, California Roach

F. 2.9-3 **Implementation of the proposed Plan could interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridor,** or impede the use of native wildlife nursery sites. Some of those impacted species may include: Bivalves/ Mollusks/ Invertebrates- native oysters, clams polychaete worms, sea snail (*Littorina planaxis*) bivalves

(*Macoma balthica*), (*Mya arenaria*) and (*Mytilus edulis*)

Fish – Steelhead, Tidewater Goby, pacific herring, bat rays, sculpin, three-spined stickleback, California Roach.

Crustaceans – Crab (*Hemigrapsis oregonensis*)

Mammals: Big Brown Bat, Common Gray Fox, Harbor Seal, Black-tailed Jackrabbit, Little Brown Bat, Yuma Myotis (Bat) Salt Marsh Harvest Mouse, Northern River Otter, Striped Skunk, Raccoon, Opossum

G. The fact stated in the EIR that many migratory corridors have already been fragmented or degraded to the point that their function as linkages is limited creates **an additional reason to protect existing corridors from continued degradation by Plan's proposed PDA development.**

"Most of the contiguous migration corridors have been lost to development. The remaining corridors are more critical than ever in supporting biologic and habitat processes to occur. Therefore, further degradation would be equivalent to a taking of species that rely on those corridors and violates of State and Federal Fish and Wildlife Codes. (Laura Chariton, M.A. Riparian Policy)

## XIII. Visual Resources -

A. **Proposed plan with high density development in our semi-rural community will degrade the visual character of the gateway to our community and the GGNRA** and obstruct the appropriate visual access to the adjacent open space which has been prioritized for a passive marshside park in our Tamalpais Area Community Plan.

B. **Priority Conservation Areas (PCAs)** comprise significant open spaces for which there exists broad consensus for long-term protection but face nearer-term development pressure. **The PCA designated in the proposed Plan for our area appears to be limited to Bothin Shoreline. However the adjacent area prioritized for preservation and protection as a buffer zone for the PCA (passive marshside park ) by local policies has now been included in the PDA.** As your EIR states PCAs play a particularly important role in the North Bay—where they are central to the character of many communities. (see 1.2-27)

## XIV. Public Utilities -

A. At a time when we are working to live sustainably within our watershed utilizing conservation and limiting use of imported or engineered water, the increased population can strain our ability to achieve 'no net increase' which is an objective of our Countywide Plan.

B. Together, surface water and ground water currently supply approximately 31 percent of Bay Area water. **Surface water** from local rivers and streams (including the Delta) **is an important source** for all Bay Area water agencies, but **particularly so in the North Bay counties, where access to imported water is more limited due to infrastructure limitations. While numerous factors influence water demand overall**

**population growth is the most important factor.** Demand management and conservation programs helped limit the overall increase of water use in the Bay Area.

C. 2.12-4 **Significant and Unavoidable**

**Development under the proposed Plan could require and result in the construction of new or expanded water and wastewater treatment facilities, which could cause significant environmental impacts.** Criterion 4 : Implementation of Plan Bay Area would have a **potentially significant adverse impact….**

D. **Availability of actual , not paper, water is essential. Limits to growth are established in part by our ability to live within our watershed.**

E. **The EIR Fails To Adequately Disclose, Analyze and Mitigate Potentially Significant Impacts from insufficient water in more than one dry year which can adversely impact public health and safety through reductions of available water for residential and fire protection services.**

F. **Future energy conservation, which is supposedly a primary purpose of the Plan, requires avoidance of creating the necessity of constructing desalination facilities which are hugely energy consumptive and expensive.** Additionally, in Marin such a plant poses potential adverse health impacts from being sited in the most polluted water body in California across from the worst industrial polluter in California. Therefore **continued escalation of growth (projected 30% regionwide or 11% in Marin) is in itself an ecological problem.**

G. **Wastewater infrastructure is aging and periodically overwhelmed and failing causing sewage spills in our already compromised Bay.** Waste disposal agencies have different capacities and will probably experience differences in their ability to serve additional residential development. The costs of expanding service may be prohibitive on top of the expense of required maintenance of existing systems. **The Plan does not identify the financial resources required to expand the existing utilities at a time when public budgets are shrinking.**

## XV. Public Services and Recreation

A. **To maintain adequate levels of service overall service levels may need to grow. To meet increased demand for schools, library, and recreation facilities implementation of the proposed Plan would require additional facilities, personnel and equipment to ensure acceptable levels of service. (See 2.14-1 Significant and Unavoidable)**

B. Impact Analysis - **Potentially Significant Adverse Impact**

**Implementation of the proposed Plan would have a potentially significant adverse impact if it would: Criterion 1: Result in the need for new or expanded facilities, the construction of which causes significant environmental impacts, in order to maintain adequate schools, emergency services, police, fire, and park and recreation services as a result of Plan Bay Area.**

C. **Potential construction related impacts of new public service facilities** could have impacts on aesthetics, air quality, cultural resources, geology, land use, noise, transportation, utilities, and other related impacts. Therefore, **impacts related to schools, emergency, police, fire, and park and recreation are considered potentially significant (PS).**

D. **Each general plan is required to have a safety element to reduce the possible risks related to death, injuries, property damage, and economic and social dislocation resulting from fires, floods, earthquakes, landslides, and other hazards.** Included in the safety element is the emergency response section, which describes the service areas of emergency services, including fire, police, and ambulance, and an evaluation of the adequacy of the existing service and the demand for additional emergency services.

E. **The increases in total regional travel activity are expected to result in an increase in vehicle hours of delay (VHD) and increase in LOS F** (see Chapter 2.1: Transportation). This is already a very serious local problem! These delays are largely due to projected regional growth in population….Nonetheless, increases in congestion could impact service levels for fire and police services, thereby requiring additional facilities or staffing in order to meet service standards on congested roadways.

F. Localized Impacts - Potentially Significant

In order to support new development, improved (or new) infrastructure and services must be funded and maintained. For instance, additional fire service capacity may be needed to serve high rise development as compared to existing low and mid-rise development. **Our Tamalpais Area Community Plan states that increased population will require addition services to maintain service level. The proposed Plan assumes an increase in public service facilities and personnel will be possible as the population increases. Whether there would be funds available for this from budgets in which services are being reduced is doubtful; therefore, there**

**would likely be a decline in essential services such as fire and police.**

As a detailed assessment of local needs is infeasible at the regional scale. **Impacts at the regional and local levels are potentially significant (PS).**

G. **In the Tamalpais Valley community there is no more room for additional children at the school or room to further expand so even some of current residents are having to travel elsewhere expending more GHGs. New development will exacerbate this situation as** the proposed plan would increase population which would exceed the capacity of local school.

H. **Open space resources serve residents from throughout the region, so park acreage in Marin is actually serving residents throughout the region. Implementation of the proposed Plan would increase the number of residents making use of existing parkland** and could result in accelerated physical deterioration of parks and recreational facilities as well as the increased expense of services which are necessary to maintain them (park, police and fire).

## XVI. Hazards -

### A. Materials -

1. **Sites in our Tamalpais/Almonte community (PDA/TTP) are either on or impacted by identified hazardous materials** according to expert , Mr. Matthew Hagemann, P.G.,C.Hg.,QSD,QSP. He has submitted comments to the Marin County Housing Element 2012 DEIR that identify the many hazardous sources in Tamalpais Valley PDA which create significant unmmitigatable adverse impacts. Development of vacant or previously developed lots that have been impacted by petroleum hydrocarbons from leaking underground storage tanks or other chemical constituents could expose individuals to hazardous conditions at the site or on neighboring properties that involve the use of hazardous materials or hazardous wastes. Sites identified for residential development in Tamalpais Valley are contaminated from the past.

2. Development of any of the Project's identified sites in Tamalpais Valley pose potentially significant health risks to construction workers and future residents through vapor intrusion, dermal contact and inhalation. **These significant impacts were not adequately disclosed or analyzed in the Housing Element's DEIR and are not being considered in the analysis of the continued expectations of our PDA in the Bay Plan.**

3. **The EIR fails to adequately disclose, analyze and mitigate potentially Significant Health Impacts from Soil and Groundwater Contamination**

4. **The hazard impacts related to land use changes from the implementation of the proposed Plan at the regional and local level are considered potentially significant (PS) Impact 2.13-4.**

5. 2.13-4: **Significant and Unavoidable**

**Implementation of the proposed Plan could result in projects located on a site which is included on a list of hazardous materials sites** compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.

6. EIR should require mitigation to reduce significant impacts to construction workers and residents to less than significant levels.

7. However, ***MTC/ABAG cannot require local implementing agencies to adopt the mitigation measures. Therefore it cannot be ensured that the Plan's mitigation measures would be implemented in all cases, and therefore impacts described in this Plan remain significant and unavoidable (SU).***

## B. Heliport

1. With **helicopters taking off and landing frequently at Heliport in Tamalpais Valley in close proximity to proposed PDA/TPP development sites there is the potential for safety risks to residents. The EIR does not disclose or analyze the impact of this Heliport.**

2. **2.13-5: Impact (see Plan's Criterion 5 page 840 ) Implementation of the proposed Plan could result in a safety hazard for people residing or working in the planning area f**or projects located within an airport land use plan or, where such a plan has not been adopted, **within two miles of a public airport or public use airport**. CEQA Section 21096 requires that when preparing an environmental impact report for any project situated within an airport influence area as defined in an ALUC compatibility plan (or, if a compatibility plan has not been adopted, within two nautical miles of a public-use airport), lead agencies shall utilize the California Airport Land Use Planning Handbook as a technical resource with respect to airport noise and safety compatibility issues. **Identifying a resource does not disclose or ensure**

**feasible and compatible mitigation.**

## C. Emergency Access and Egress

1. **The added congestion from more development, particularly high density development, in an area already and inevitably constrained by F level traffic with one lane in and out between Highway 1 and 101 creates a serious unmmitigatable adverse impact regarding access and egress in emergencies.** This is particularly problematic with an increased senior resident population needing rapid response time due to medical emergencies.

2. **There is significant risk of loss, injury, or death in the event of need for evacuation in a community such as Almonte and Tamalpais Valley which are both high seismic and high wildland fire risks as indicated on maps in the 2007 Marin Countywide Plan and the Plan's fire hazard area map, Figure 2.13-3.**

3. **The potential for wildland fire hazard impacts related to land use changes from implementation of the proposed Plan at the regional and local level are considered potentially significant (PS).**

Criterion 8 references impact concern - **Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas** or where residences are intermixed with wildlands.

4. Development that has spread into less densely populated, often hilly areas has increased the number of people living in heavily-vegetated areas where wildlands meet urban development, also referred to as the wildland-urban interface. This trend is spawning a third classification of fires: the urban wildfire. The 1991 Oakland Hills fire above Berkeley and Oakland is an example of an urban wildfire. **A fire along the wildland-urban interface can result in major losses of property and structures.**

5. **Emergency Response Plan : Related to Criterion 7 (pg.840)**

2.13-7 **None required (mitigation) - Less than significant !**

**Implementation of the proposed Plan could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.**

6. **The assessment 2.13-7 above is seriously inadequate and reflects both a lack of understanding of planned sites and people's needs!** T**he potential for**

**adverse emergency services and emergency evacuation plan impacts related to land use changes from the implementation of the proposed Plan at the regional level should not be considered less than significant when pursuing potential PDAs in which modifications to accommodate growth are not possible such as in Tamalpais Valley.**

## XVII. Employment

1. **According to the EIR "under the proposed Plan, the overall ratio of jobs to employed residents will remain stable at the regional level from 2010 to 2040. " This presumes that the planners know what economic conditions will exist in the next 30 years for which they provide only speculative and no substantive evidence. Predictability of the economy is limited as evidenced by the recent "severe national economic recession" (and past ones) and the variability of boom and bust in particular sectors (dot-com and construction) and levels of unemployment and therefore, this is not a sound basis for such extensive and expensive planning.**

2. According to the EIR under proposed Plan the "ratio of out-of-region workers remains constant with historic trends; therefore, as the overall number of jobs increases, the total number of in-commuting workers would be expected to increase proportionately. As indicated in Chapter 2.1 of this EIR, **overall mobility in the region will be more constrained in 2040 than it was in 2010, even with implementation of the proposed Plan. There will be more peak period congestion and more total vehicle hours of delay.**
**This means that the fundamental concern with insufficient proximity of jobs and housing has not been altered as a means to achieve reduction of GHG in spite of billions of dollars spent and increasing consumption of resources required for projects in the proposed Plan.**

3. TABLE 3.2-5 : 2010 EMPLOYMENT BY COUNTY – NET IMPORTERS/ EXPORTERS OF WORKERS AND JOBS/HOUSING BALANCE

**In Marin in 2010 the number of employed residents exceeds the number of jobs; the imports/exports of workers is considered 'equal'.** (There are -7,700 jobs to employed residents.)

4. TABLE 3.2-6: 2010 & 2040 EMPLOYED RESIDENTS AND JOBS BY COUNTY AND NET IMPORTERS/EXPORTERS OF WORKERS

**Table 3.2-6 shows that all nine counties will maintain their existing status as net importers or exporters of workers from 2010 to 2040 under the proposed Plan."**

5. In Marin the **number of employed residents projected** is 136,478 with no project (1040) and 136,476 with preferred plan (1940) . **Between the no project alternative and the proposed Plan there is a projected difference of 2 employed residents!**

There is projected increase from 2010 of 18,043 employed residents by 2040. The number of jobs in Marin is predicted to be 126,343 with no project (1940) and 129,118 (preferred plan). This an increase of 2775 jobs. However, **the number of import/export jobs is considered equal. Again , the tables show that the commute patterns have not been altered by the proposed Plan. The projected increases in employment are also questionable due to the unpredictability of the economy and the impacts of climate change.**

**6.** Planning for a jobs-housing balance is based on the premise that the number of work trips by car, the overall number of vehicle trips, and the resultant vehicle miles traveled can be reduced when there are sufficient jobs available locally to balance the employment demands of the community. **According to this EIR these numbers are not going to change and this Plan has no direct power to create jobs locally which will result in an adverse impact on the areas where housing without jobs is being increased!** The EIR indicates increasing congestion overall could discourage new firms from locating in the Bay Area or cause some existing firms to consider relocating away from the region and there are limited fiscal resources for expansion of transportation system capacity. **The fact that there is another alternative identified specifically for jobs makes it evident that the proposed alternative is not the alternative preferred for promoting jobs.**

7. **Table 3.2-2 FORECASTED GROWTH BY AGE GROUP AS A PERCENT OF THE TOTAL (2010-2040)**

**0-24 years (25%) 25-44 years (17%) 45-64 years (1%) 65 years and over (137%) !!!**

**"**The population of the Bay Area is expected to increase across all age groups, but with the largest increase (137 percent) happening in the age bracket of 65 and over, and the smallest increase (1 percent) happening in the age bracket of 45 to 64 years, as shown in Table 3.2-2. This indicates a change in overall composition of Bay Area residents towards an aging population. Effects of the growing senior population are expected to include an increase in the amount of residential care facilities and a decline in the labor force."

8. ABAG projects that the Bay Area's **population will grow another 30 percent** from the 2010 level (over 2.1 million more residents), and **employment will**

**increase by 33 percent** (over 1.1 million additional jobs). This growth is summarized in Table 3.2-1. **Two major demographic changes shape these forecasts as they relate to household and job growth: the increase in the senior population and the increase in the Latino and Asian populations.**

**These facts do not correlate. The huge increase (%) in senior population will not represent increased employed residents. The increase in Latino and Asian populations culturally have lived and survived through multi-generational family household networks which will not be well-served by small units in high-rise apartments in close proximity to hazardous TACs from mobile transit or jeopardized by safety risks from seismic events, inundation, sea level rise and traffic congestion!**

**The fact that the proposed Plan indicated that in the future the costs for these families will rise to 69% for housing and transit further illustrates the inadequacy and inability of this Bay Plan to address the real needs of people living in the Bay Area! In fact, areas that have significant transit and high density development (as proposed in the Plan) like San Francisco have become increasing expensive and exclusive causing continued exodus and displacement of those who can't afford it. It is clear that densification has actually created more social injustice. The fact that the proposed plan is not the 'equity alternative' or the preferred 'environmental' plan is indicative of its inability to address these needs.**

## XVIII. Growth-inducing Effects and Cumulative Impacts

1. **"**Over the next 30 years, with or without Plan Bay Area, the Bay Area population is anticipated to continue to grow, increasing by 30 percent. The proposed Plan is intended to help shape and accommodate this growth….It would be inaccurate to describe the Plan as growth-inducing as it was designed to accommodate, rather than to encourage, projected regional growth…." The EIR must examine the potential growth-inducing impacts of the proposed Plan. More specifically, CEQA Guidelines require that the EIR "discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly" (CEQA Guidelines Section 15126.2(d)).

2. According to the EIR this analysis includes consideration of "removal of obstacles to population growth" and development of new residential development in areas that are "currently only sparsely developed or underdeveloped". Infill development can also result in growth-inducing impacts when it exceeds existing infrastructure capacity in areas targeted by this Plan.

3. This Plan **is growth-inducing when its PDA and TPP structure targets specific areas which would not be likely to be developed, especially to the extent proposed, due to constraints and then facilitates their development with streamlining and overriding these conditions and creating incentives to attract their development . Instead of applying limits to growth based on infrastructure capacity, the Plan creates the necessity of exceeding our limits with accompanying adverse impacts. This reflects the growth-inducing impacts as growth would otherwise be limited.**

**4. These growth-inducing impacts are particularly egregious when the Plan cannot identify, analyze or enforce their mitigations to reduce the adverse cumulative impacts of incremental "individually limited but cumulatively significant projects. "** "Cumulatively considerable means two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (CEQA Guidelines § 15065(a)(3)). Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time. **The EIR states that all of the impacts addressed in Part Two are considered cumulative.**

**5. Future environmental review would be subject to CEQA requirements applicable at that time. Current assumptions about review and mitigations may be altered rather than assured by new amendments, regulations, judicial decisions, impact thresholds, and increasing adverse environmental conditions. This can create unpredictable cumulative impacts which reflect inconsistency in incremental review.**

## XIX. 3.2 CEQA Required Conclusions Regarding : The five Significant Irreversible Environmental Changes and thirty-nine Significant Unavoidable Impacts

1. A Plan for the Bay Area needs to serve the needs of its residents without subjecting them to these impacts. It would not benefit people, other species or the environment to override these adverse impacts. Future planning should reflect accurate information about local conditions and constraints so that the health and safety of future residents will not be jeopardized. To create a realistic plan would require utilizing local public knowledge and input which is not evident in this Plan.

2. Forecasting for 30 years will subject areas to development which can be undermined by uncertainties of changing climate and land conditions and economic variability. This can result in faulty short-sighted speculative land use decisions with long-range implications from adverse impacts such as those not fully considered in this EIR such as from sea level rise.

3. This Plan focuses on projects that intensify congestion without the ability to offset their cumulative effects. To proceed while ignoring the potential effects of the environment on these projects because we lack the knowledge to factor in this information at this time is irresponsible and furthers liability.

4. Therefore, I request that you not consign non-renewable resources to uses that future generations will probably be unable to reverse as required by this Plan. Further, I recommend that you do not recommend overriding the identified significant unavoidable adverse impacts and do not certify this insufficient EIR. Lastly in regard to these impacts stated in the CEQA Conclusions this Plan should not be approved.

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