After the close of the public comment period for the Connect SoCal PEIR, several changes occurred to the regulatory context of the Plan. In addition to SCAG's technical refinements to Connect SoCal (described and analyzed in **Chapter 2.0**, **Technical Refinements to the Plan and Environmental Effects**, of this Addendum), SCAG received two comment letters from the Center of Biological Diversity (CBD), on May 1, 2020, and May 6, 2020, after the close of the comment period and prior to certification of the Connect SoCal PEIR on May 7, 2020. As the comments were received outside of the comment period, no formal response is required. However, the comment letters provide information related to the environmental setting, environmental impacts, and consideration of other mitigation measures in the PEIR. Therefore, SCAG determined that a PEIR Addendum should be prepared to reflect the additional information provided by CBD. This chapter presents such information so that it is available to the public and decisionmakers in taking action on the Plan.

Therefore, none of the following (as identified in CEQA Guidelines Section 15162) would result from the technical refinements and/or clarified information, analyses and mitigation measures:

- One or more significant effects not discussed in the PEIR.
- Substantial increase in the severity of a previously identified significant effect.
- New mitigation measures or alternatives that were previously found not to be feasible would be, in
 fact, be feasible and would substantially reduce on or more significant effects of the project but are
 declined to be adopted by the project proponent.
- Mitigation measures that are considerably different from those analyzed in the EIR that would substantially reduce on or more significant effects but are declined to be adopted.

In general, this information updates regulatory information, expands/clarifies environmental setting information, and further clarifies the significant impacts already identified in the PEIR. Detailed responses to CBD's letters are provided in the Appendix to the Addendum.

3.3 AIR QUALITY

PEIR Page 3.3-14 (within the discussion of environmental setting), provides information on particle pollutants related to humans. The following paragraphs expands the discussion by providing additional information related to pollutants and sensitive species. This information expands and clarifies the

existing information provided in Section 3.3, Air Quality, and is not new significant information as identified in CEQA Guidelines Section 15162.

Air Quality Impacts to Sensitive Species

In addition to impacts to human health, air pollutants have the potential to impact plants including trees and agricultural crops and wildlife. Impacts to sensitive species can be particularly important because such species are typically already stressed, and the additional stressor of poor air quality can have a disproportionate impact. The potential damage ranges from decreases in productivity, a weakened ability to survive drought and pests, to direct mortality. Wildlife can be both directly impacted by air pollution and also as the plants and trees that comprise their habitats are weakened or killed. Aquatic species and habitats are impacted by air pollution through the formation of acid rain that raises the pH level in oceans, rivers and lakes. See also discussion of impacts of Nitrogen Deposition on Sensitive Species in the discussion of Biological Resources below.

PEIR Page 3.3-29 (within the discussion of regulatory framework), provides information on the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule. The following paragraph expands the discussion by providing an update on the status of the SAFE Rule and is not new significant information as identified in CEQA Guidelines Section 15162.

Clean Air Act Waiver for California's GHG Emission Standards for New Motor Vehicles

After publication of the Final PEIR on March 27, 2020, the Safe Rule Part II was signed into law (March 31, 2020, published in the Federal Register April 30, 2020 and effective June 29, 2020). SCAG worked with CARB, USEPA, and FHWA/FTA to identify whether further adjustments to SCAG modeling were necessary to reflect SAFE Part II. It was determined by CARB (and accepted by US EPA and FHWA) that no additional EMFAC off-model adjustment factors were needed to account for the SAFE Part II Rule, and therefore no further adjustments have been made to SCAG modeling as a result of the SAFE Part II Rule.

3.4 BIOLOGICAL RESOURCES

PEIR starting on Page 3.4-12 and Table 3.4-3, Sensitive Wildlife Species Reported in the SCAG Region (within the environmental setting), provides general information on sensitive species in the SCAG region. There are numerous sensitive species including federally and state designated species located in the diverse habitats found in this large area. The PEIR does not provide a discussion of each species, rather

EPA, What is Acid Rain? Webpage. https://www.epa.gov/acidrain/what-acid-rain

the PEIR follows the Plan's multi-species approach to the regions high level of biodiversity. The list of species is updated regularly. Most recently (after publication of the Draft PEIR and substantial completion of the Final PEIR) the Southern California Mountain Lion was identified as a potential candidate species and the Western Joshua Tree and Quino Checkerspot butterfly are to be considered for candidate status in the near future. The following paragraphs provide discussion of these species to augment the information provided in Section 3.4, Biological Resources; it is not new significant information as identified in CEQA Guidelines Section 15162.

Southern California/Central Evolutionary Significant Unit (ESU) of Mountain Lion

On April 16, 2020, the California Fish and Game Commission (CFGC) voted unanimously to advance the Southern California/Central evolutionary significant unit (ESU) of mountain lion to candidacy under the California Endangered Species Act (CESA). Mountain lion populations in Southern and Central Coast California are imperiled as a result of human activities. Land use planning must integrate habitat connectivity in order to protect mountain lions. Continued habitat loss and fragmentation has led to 10 genetically isolated populations within California. There are six identified imperiled mountain lion populations in the ESU; four populations occur within the SCAG region, and they include: the Santa Monica Mountains lions, the Santa Ana Mountains lions, the San Gabriel/San Bernardino Mountains lions, and the Eastern Peninsular Range lions. At least two of the populations (Santa Monica Mountains and Santa Ana Mountains) are severely constrained and facing an extinction vortex due to high levels of inbreeding, low genetic diversity, and high human-caused mortality rates from car strikes on roads, depredation kills, rodenticide poisoning, poaching, disease, and increased human-caused wildfires. 2,3,4,5,6

The effective population sizes of the four populations within the SCAG region range from 4 to about 32 mountain lions. An effective population size of 50 is assumed to be sufficient to prevent

3.0-3 Connect SoCal PEIR Addendum 1329.001 September 2020

Ernest HB, Boyce WM, Bleich VC, May B, Stiver SJ, Torres SG (2003) Genetic structure of mountain lion (Puma concolor) populations in California. Conserv Genet 353-366

Ernest HB, Vickers TW, Morrison SA, Buchalski MR, Boyce WM (2014) Fractured genetic connectivity threatens a Southern California puma (Puma concolor) population. PLoS One 9: . doi: 10.1371/journal.pone.0107985

Riley, S. P. D., Serieys, L. E. K., Pollinger, J. P., Sikich, J. A., Dalbeck, L., Wayne, R. K., & Ernest, H. B. (2014). Individual behaviors dominate the dynamics of an urban mountain lion population isolated by roads. Current Biology, 24(17), 1989-1994.

Vickers, T. W., Sanchez, J. N., Johnson, C. K., Morrison, S. A., Botta, R., Smith, T., ... Boyce, W. M. (2015). Survival and mortality of pumas (Puma concolor) in a fragmented, urbanizing landscape. PLoS ONE, 10(7), 1–18

Benson, J. F., Mahoney, P. J., Sikich, J. A., Serieys, L. E. K., Pollinger, J. P., Ernest, H. B., & Riley, S. P. D. (2016). Interactions between demography, genetics, and landscape connectivity increase extinction probability for a small population of large carnivores in a major metropolitan area. Proceedings of the Royal Society B: Biological Sciences, 283(1837), 20160957.

inbreeding depression over five generations, while an effective population size of 500 is considered sufficient to retain evolutionary potential in perpetuity. All of the populations in the SCAG region are well below that minimum threshold of 50, which indicates that these populations are at serious risk of becoming extirpated. Furthermore, mountain lions in the Santa Monica and Santa Ana mountains have been found to have dangerously low genetic diversity and effective population size, and they are likely to become extinct within 50 years if nothing is done to improve gene flow with other mountain lion populations. ^{7,8,9}

The primary threat to the long-term survival of mountain lions in the Southern California/Central Coast ESU is genetic isolation due to lack of connectivity caused by continuous development in mountain lion habitat with little consideration to their movement needs. Mountain lions are wide ranging species that have home ranges of 75 to 200 mi². Thus, the persistence of the four populations with the SCAG region relies heavily on being connected with mountain lions throughout the ESU as well as statewide.

Negative edge effects from human activity, traffic, lighting, noise, domestic pets, pollutants, invasive weeds, and increased fire frequency have been found to be biologically significant up to 300 meters (~1000 feet) away from anthropogenic features in terrestrial systems. Human development and associated noise can degrade adjacent wildlife habitat and behavior. One study concluded that even "nonconsumptive forms of human disturbance may alter the ecological role of large carnivores by affecting the link between these top predators and their prey". ¹⁰ In addition, mountain lions have been found to respond fearfully upon hearing human vocalizations, avoiding the area and moving more cautiously when hearing humans.

Western Joshua Tree

The western Joshua tree is currently being considered for listing under the California Environmental Species Act (CESA), if granted then CEQA status would grant the western Joshua tree temporary protections under CESA including heightened review and analysis of projects that have the potential

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⁷ Ibid.

Gustafson, K. D., Gagne, R. B., Vickers, T. W., Riley, S. P. D., Wilmers, C. C., Bleich, V. C., ... Ernest, H. B. (2018). Genetic source–sink dynamics among naturally structured and anthropogenically fragmented puma populations. *Conservation Genetics*, 20(2), 215–227.

Benson, J. F., Mahoney, P. J., Vickers, T. W., Sikich, J. A., Beier, P., Riley, S. P. D., ... Boyce, W. M. (2019). Extinction vortex dynamics of top predators isolated by urbanization. *Ecological Applications*, 0(0), e01868

Smith JA, Suraci JP, Clinchy M, Crawford A, Roberts D, Zanette LY, Wilmers CC (2017) Fear of the human 'super predator' reduces feeding time in large carnivores. Proc R Soc B Biol Sci 284:20170433 . doi: 10.1098/rspb.2017.0433

to directly and indirectly impact the western Joshua tree. The species is found only within a specific range of temperature and precipitation, restricting the range. Increased temperatures, reduction in precipitation, development, wildfires, invasive species, and other threats endanger the continued viability of the species.

Quino checkerspot butterfly

The Quino checkerspot butterfly was listed on the Federal Endangered Species Act in 1997. The CBD released a petition to list the Quino checkerspot butterfly as endangered under CESA on June 29, 2020. Quino checkerspot (Euphydryas editha quino) was a common spring butterfly of the open forblands, grasslands, and sparse shrublands of Southern California where it typically laid its eggs on the small native forb, Plantago erecta (Mattoni et al. 1997). As these landscapes were lost to urban development throughout Los Angeles and Orange county, the remaining populations in Riverside and San Diego counties have been threatened by the invasion of nonnative grasses spread through the ranching era and accelerated by deposition of nitrogen.

PEIR Pages 3.4-5 to 3.4-44 characterize the biological resources in the SCAG region. The following paragraphs provide context as to existing threats to sensitive species posed by nitrogen deposition. This information expands the existing information provided in Section 3.4, Biological Resources, and is not new significant information as identified in CEQA Guidelines Section 15162.

Nitrogen Deposition Effects on to Sensitive Species

As discussed in Section 3.3, Air Quality, nitrogen oxides (NOx) are released in the air through the burning of fossil fuels (including vehicles fueled by fossil fuels), agricultural fertilizer application, and livestock waste. NOx emissions react with dust or dissolve into rainwater and fall onto ecosystems as reactive nitrogen (Nr) deposition. An increase in nitrogen inputs can lead to soil and water acidification, plant nutrient imbalances, declines in plant health, changes in species composition, increases in invasive species, increased susceptibility to secondary stresses (i.e. freezing, drought, and insect outbreaks). Nitrogen saturation occurs in areas where nitrogen exceeds the plant and microbial demand. In areas with nitrogen deficiencies, nitrogen deposition can be beneficial.

Science News. 2016. Study finds wide-reaching impact of nitrogen deposition on plants. Available online at: https://www.sciencedaily.com/releases/2016/03/160330174216.htm

National Park Service. *Studying Reactive Nitrogen Deposition*. Available online at: https://www.nps.gov/articles/cave n study.htm.

Pardo, L.H. 2010. USDA. Assessment of Nitrogen Deposition Effects and Empirical Critical Loads of Nitrogen for Ecoregions of the United States. Available online at: https://www.nrs.fs.fed.us/pubs/gtr/gtr nrs80.pdf

Specifically, areas can see increases in forest growth, carbon sequestration, and stand health in general. ¹⁴

Total nitrogen deposition includes wet and dry oxidized and reduced nitrogen. Wet deposition is when rain, snow, or fog carries gases and particles to the earth's surface. Dry deposition is when gases and particles are carried to the surface in the absence of rain, snow, or fog. Oxidized nitrogen is produced from the burning of fossil fuels as well as natural sources such as lightning, forest fires and bacterial decay. ¹⁵ Oxidized nitrogen include nitric acid (HNO₃), nitric oxide (NO), nitrogen dioxide (NO₂), ammonia (NH₃), and particulate nitrate (NO₃). ¹⁶ Reduced nitrogen is primarily emitted from agricultural systems but also from automobiles. Reduced nitrogen includes ammonia and particulate ammonium (NH₄). ¹⁷ In March 2020, the U.S. EPA released regional trends in nitrogen deposition. The annual average total deposition rate of nitrogen in the Pacific region of the U.S. decreased by approximately 11% from 3.7 kg-N/ha to 3.3 kg-N/ha between the periods 2000 – 2002 and 2016-2018. The total deposition of oxidized nitrogen decreased by approximately 37% from an annual average 2.7 kg-N/ha to 1.7 kg-N/ha over the same time period. The total deposition of reduced nitrogen increased approximately 36% from an annual average of 1.1 kg-N/ha in 2000-2002 to 1.5 kg-N/ha over the same time period. ¹⁸ 19

Studies have shown that automobile NH₃ emissions within the South Coast Air Basin come primarily from light-duty gasoline vehicles (depending on the age and mode of driving) and dairy facilities. ²⁰ NH₃ can cause short-term and long-term health impacts including eye/lung irritation and impacts to the cardiovascular system. There are no state or national-scale measurements to establish a baseline for ammonia concentrations. However, the National Atmospheric Deposition Program has established the ammonia monitoring network to measure ambient ammonia gas in 100 sites across the U.S. The SCAG region only includes one of these monitoring stations located at Joshua Tree

National Park Service. *Studying Reactive Nitrogen Deposition*. Available online at: https://www.nps.gov/articles/cave_n_study.htm.

EPA Enviroatlas. *Total Annual Nitrogen Deposition*. Available online at: https://enviroatlas.epa.gov/enviroatlas/DataFactSheets/pdf/ESN/TotalAnnualNitrogenDeposition.pdf.

¹⁶ EPA Enviroatlas. *Total Annual Oxidized Nitrogen Deposition*. Available online at: https://enviroatlas.epa.gov/enviroatlas/DataFactSheets/pdf/ESN/TotalAnnualOxidizedNitrogenDeposition.pdf

EPA Enviroatlas. *Total Annual Reduce Nitrogen Deposition*. Available online at: https://enviroatlas.epa.gov/enviroatlas/DataFactSheets/pdf/ESN/TotalAnnualReducedNitrogenDeposition.pdf

EPA. *Progress Report. Acid Deposition*. Available online at: https://www3.epa.gov/airmarkets/progress/reports/acid-deposition-figures.html#figure3

EPA Enviroatlas. *Total Annual Reduce Nitrogen Deposition*. Available online at: https://enviroatlas.epa.gov/enviroatlas/DataFactSheets/pdf/ESN/TotalAnnualReducedNitrogenDeposition.pdf

National Atmospheric Deposition Program. *Ammonia Monitoring Network (AMoN)*. Available online at: http://nadp.slh.wisc.edu/amon/

National Park. Monitoring began in 2010 and the highest concentration of ammonia reported was $3.87~\mu g/m^2$ in September 2012.²¹

As indicated in Section 3.3, Air Quality, of the PEIR, vehicular NOx emissions are regulated by CARB. In general, vehicular NOx emissions are controlled effectively by catalytic converters. A side effect of catalytic converters is the production of NH₃. As a result, although total NOx is going down in response to regulation, NH₃ has continued to be produced by catalytic converters. NH₃ is an important driver of nitrogen deposition in urban-affected areas and near roadways.²²

Nitrogen deposition has the potential to impact sensitive habitats and species. An increase in nitrogen inputs can lead to soil and water acidification, plant nutrient imbalances, declines in plant health, changes in species composition, increases in invasive species, increased susceptibility to secondary stresses (i.e. freezing, drought, and insect outbreaks).

As stated above, there are no state or federal standards for measuring NH₃ (ammonia gas), and there is only one monitoring station in the SCAG region that measures ammonia gas. As such, measurement and quantification of NH₃ emissions is unreliable. Further, with no national or state standards, there is no threshold for comparison for CEQA purposes.

PEIR Pages 3.4-62 to 3.4-73 analyzes the potential impacts of the Plan on candidate, sensitive and special status species. The following discussion provides additional information regarding the effects of nitrogen deposition and the Plan's approach to habitat protection. This information expands the analysis of BIO-1 provided in Section 3.4, Biological Resources, and is not new significant information as identified in CEQA Guidelines Section 15162.

Potential Impact of Changes in Nitrogen Deposition

As shown in Table 3.3-4, PEIR page 3.3-18, all air quality management districts within the SCAG region are within attainment for NO2. However, the Mojave Desert Air Basin, Salton Sea Air Basin, South Central Coast Air Basin, and South Coast Air Basin are all in non-attainment for ozone. ROG and NOx emissions are precursors to ozone; therefore, the air basins are reducing NOx emissions in order to reduce ozone and meet attainment. As a result, NOx emissions must continue to be reduced in the SCAG region in order to meet NAAQS attainment standards for ozone; However, as noted above, one of the technologies used to reduce NOx emissions (catalytic converters) results in the

National Atmospheric Deposition Program. *Ammonia Monitoring Network (AMoN)*. Available online at: http://nadp.slh.wisc.edu/amon/

https://www.fs.fed.us/psw/publications/fenn/psw 2018 fenn001.pdf

production of NH₃ (ammonia gas), which in turn drives nitrogen deposition in urban areas near roadways. Therefore, while NOx may decrease in the region, NH₃ may still be produced by catalytic converters. NH₃, however, is expected to be reduced both with newer model cars and through the introduction of non-combustion engines. As total VMT increases, NH₃ could continue to rise depending on the composition of the vehicle fleet. As stated above, currently, there are no state or national standards for NH₃.

Within the SCAG region, the increase in total VMT and construction of transportation and development projects could lead to an increase in nitrogen deposition that would be harmful to sensitive species. As shown in Table 3.17-14, Total VMT 2019 and 2045 By County, of the Final PEIR, total daily VMT in 2045 would increase when compared to current daily VMT. However, per capita VMT would decrease compared to today and total VMT would be less than if the Plan were not implemented. Unlike NOx, which is shown to decrease despite increasing total VMT, it is unclear whether NH₃ and total deposited nitrogen has the potential to increase with total VMT due to variables such as engine type and age of car.

The relationship between VMT and NH₃ is unclear. While catalytic converters control NOx emissions, they do produce NH₃. But as more combustion engines are removed from the road and newer models with cleaner technologies increase, including prevalence of electric cars, NH₃ could actually decrease over the lifetime of the Plan. The Plan supports fleet changes through the inclusion of transportation strategies aimed at electric fleets and other emerging technologies, and in fact, LA Metro, the largest bus fleet in the region, is in the process of phasing out all combustion (gasoline and natural gas) buses from its fleet.

Emerging technologies vary when it comes to their effect on VMT and the removal of combustion engines, and the effect on NH₃ emissions. Some of these technologies, such as alternative fuel vehicles, micro-mobility, bikesharing and microtransit, have a mitigating influence on VMT and encourage fleet changes. Others, such as ride-hailing and automated vehicles, are expected to increase VMT and if their business models do not adapt, but also have the potential to reduce NH₃ emissions, if not powered by combustion engines. Emerging technologies and transportation strategies are further complicated by new work and travel patterns as a result of the ongoing pandemic. Nonetheless, as car fleets turn over, and there are fewer combustion engines on the road, overall nitrogen deposition may not continue to increase, but the overall effect is currently uncertain and speculative.

Plan Approach to Habitat Protection

There are numerous protected species in the SCAG Region (see PEIR Tables 3.4-2 and 3.4-3); it is not possible to determine which of these species may be impacted by specific projects. Rather, the Connect SoCal Plan takes a multi-species benefit approach to conservation, intended to protect and enhance the SCAG region's high-level of biodiversity. Connect SoCal includes key conservation approaches for the species' survival, including habitat preservation, restoration, and connectivity.

Jurisdictions within the SCAG region are aiming to reduce habitat loss and increase connectivity. Ventura County adopted the Habitat Connectivity and Wildlife Corridor project in March 2019. The project included the development of regulations and revisions to zoning ordinances (see Ventura County Ordinance No. 4537 and 4539) and general plan policies to address habitat loss and fragmentation resulting from urban growth. The California Department of Transportation (Caltrans) has also planned a wildlife life crossing through Route 101 Freeway at Liberty Canyon Road in Agoura Hills.

Connect SoCal includes a \$1 billion initiative to develop a Regional Advanced Mitigation Program (RAMP) as part of the Connect SoCal's Core Vision for Sustainable Development. SCAG anticipates that the RAMP will be funded from new revenues that are reasonably available over the life of the Plan, including the implementation of mileage-based user fees at the state and local levels. The RAMP would establish and/or supplement regional conservation and mitigation banks and/or other approaches to offset the impacts of transportation and other development projects. The program structure would be determined in the future by potential implementing entities within the region.

Inclusion of a RAMP in Connect SoCal is based upon an assessment of regional need and the support of stakeholders throughout the region. Support for regional advance mitigation programs as a key element of transportation planning strategy is growing nationally and statewide. Transportation agencies within California, and specifically the SCAG region, have been at the forefront of this trend. Due to SCAG's limited authority, the RAMP would not be able to acquire property in the same way that SANDAG's RAMP would. Instead, SCAG's role would focus more on agency coordination. SCAG plans to work with stakeholders in the future to identify how the RAMP can be structured and implemented and continue to support advanced mitigation initiatives throughout the region.

To assist in defining the RAMP, SCAG is currently leading a multi-year effort to develop a Regional Greenprint that will provide an easily accessible resource to help municipalities, conservation groups, developers and researchers prioritize lands for conservation based on the best available scientific data. Ultimately, the Regional Greenprint effort will also produce a whitepaper on Regional Advance

Mitigation Planning including approaches for RAMP in the SCAG region, needed science and analysis, models, challenges and opportunities and recommendations.

The Plan's Core Vision for Sustainable Development includes strategies intended to support implementation of the SCS, as well as a collection of land use tools that can support protection of mountain lion habit. The Green Region strategy seeks to "preserve, enhance and restore regional wildlife connectivity" (Connect SoCal page 50). Land use tools that are supported for implementation at the local level to meet this objective include Transfer of Development Rights; Urban Greening; and Greenbelts and Community Separators. Each of these strategies include policy language that directly calls for protecting wildlife habitat, enhancing biodiversity, and/or restoring habitat connectivity (Connect SoCal page 53). SCAG has already made progress in implementing the 2016 RTP/SCS by initiating development of a regional "Greenprint." The Greenprint will serve as a strategic web-based conservation tool to provide the best available scientific data and scenario visualizations to help cities, counties and transportation agencies make better land use and transportation infrastructure decisions and conserve natural and farmlands. Through an active, funded partnership with The Nature Conservancy, SCAG will deploy a regional Greenprint tool by 2022 to serve as an online mapping platform illuminating the multiple benefits of natural and agricultural lands through data related to key topics such as habitat connectivity, biodiversity, clean water, agriculture, and greenhouse gas sequestration.

The Natural & Farmlands Technical Report contains "Recommended Policies" and "Next Steps" that will benefit species, including mountain lions, Western Joshua Tree, and Quino checkerspot butterfly including improving natural corridor connectivity; encouraging advance mitigation programs; and encouraging jurisdictions to work across county lines (Connect SoCal page 21- 22).

3.20 WILDFIRE

PEIR Pages 3.20-15 of the PEIR provides regulatory framework information related to wildfire in the SCAG region. The following provides additional information on wildfire resources. This information expands the discussion provided in Section 3.20 Wildfire and is not new significant information as identified in CEQA Guidelines Section 15162.

EO N-16-19, AB 1116, SB 542 and Recent Steps to Augment Firefighting Resources

The California Department of Forestry and Fire Protection (CAL FIRE) is the state's fire protection agency responsible for protecting natural resources from fire on land designated by the State Board of Forestry as State Responsibility Areas. This includes approximately 31 million acres of the state's privately-owned wildlands. California has faced more intense fire seasons in recent years. In order to

support CAL FIRE, the state issued Executive Order (EO) N-16-19, Assembly Bill (AB) 1116, and Senate Bill (SB) 542 and increased the state budget dedicated to CAL FIRE.

In June 2019, the Governor issued EO N-16-19 which authorizes an additional 400 seasonal firefighters to CAL FIRE and 13 new fire engines.²³ In October 2019, Governor Newsom signed into law AB 1116 and SB 542 that focus on improving the physical and mental health of California's first responders. AB 1116, the California Firefighter Peer Support and Crisis Referral Services Act, establishes statewide standards for first responder peer support programs that will provide an agency-wide network of peer representatives available to help employees on emotional or professional issues. SB 542, the Trauma Treatment Act, provides first responders with worker's compensation while recovering from mental health scars and works to improve mental health awareness among firefighters.²⁴ The California 2019-2020 state budget includes \$240.3 million to enhance CAL FIRE's fire protection capabilities, with approximately \$6.6 million (and \$9.3 million ongoing) designated for CAL FIRE's health and wellness program. The health and wellness programs provide medical and psychological services as well as peer support to firefighters.²⁵

On July 9, 2020, Governor Newsom also announced that the state would retain an additional 858 firefighters and six California Conservation Corps (CCC) crews through October in order to protect emergency personnel and evacuees from wildfire during the COVID-19 pandemic.²⁶

Office of Gavin Newsom. 2019. *Governor Newsom Highlights Emergency Preparedness, Additional Resources for this Year's Fire Season*. Available online at: https://www.gov.ca.gov/2019/07/31/governor-newsom-highlights-emergency-preparedness-additional-resources-for-this-years-fire-season/.

Office of Gavin Newsom. 2019. *Governor Newsom Signs Bills to Support Firefighters and First Responders*. Available online at: https://www.gov.ca.gov/2019/10/01/governor-newsom-signs-bills-to-support-firefighters-and-first-responders/.

State of California. *California State Budget* 2019-20. Available online at: http://www.ebudget.ca.gov/2019-20/pdf/Enacted/BudgetSummary/FullBudgetSummary.pdf.

²⁶ Capitol Public Radio (CapRadio 90.9 FM Sacramento) transcript of Governor Newsom's news conference https://www.capradio.org/articles/2020/07/09/watch-live-gov-gavin-newsom-update-on-covid-19-and-fire-season-preparation/