

MEMORANDUM

To: Shawna Purvines, Principal Planner
El Dorado County

From: Cathy Spence-Wells, Principal

Subject: Biological Resources Policy Update: Notice of Preparation comments; Draft Oak Resources Management Plan and Draft Oak Resources In-Lieu Fee Nexus Study clarifications; EIR project alternatives

Date: September 18, 2015

1.0 INTRODUCTION

The purpose of this memo is to:

1. Summarize key comments raised in regards to the preparation of the Environmental Impact Report (EIR) during the Notice of Preparation (NOP) public comment period, and
2. Identify proposed revisions to the Draft Oak Resources Management Plan (ORMP) and the Draft El Dorado County Oak Resources In-Lieu Fees Nexus Study based on public and Board comments made during the May 18, 2015 and June 22, 2015 Board hearings, and the EIR scoping session held during the County Planning Commission meeting on August 13, 2015, and
3. Outline potential project alternatives that may be considered in the EIR.

This memo responds to the Board's action on June 22, 2015 to consider project alternatives as part of the environmental review process including: 1) Adding oak resource retention standards; 2) Options for Individual Oak Tree (IOT) replacement mitigation (e.g. acorn to 15 gallon potted tree) and associated analysis of the implications for the In-Lieu Fee Nexus study based on these options; and 3) Oak resource mitigation requirements related to discretionary and ministerial projects.

2.0 NOTICE OF PREPARATION COMMENTS

Following Board action on June 22, 2015 to adopt Resolutions of Intention to amend the General Plan and adopt the ORMP, Dudek and County staff prepared an NOP, as required under the

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California Environmental Quality Act (CEQA). The NOP was circulated for public review along with an Initial Study of potential project impacts. Based on the Initial Study, the NOP identifies that the EIR is expected to evaluate impacts in the areas of aesthetics, agricultural and forestry resources, biological resources, greenhouse gas emissions, and land use and planning. Eighteen written comment letters were received in response to the NOP and several individuals provided oral comments during the EIR scoping session. Key issues for the EIR analysis raised in the NOP comments include the following:

- The effects from tree removal under the proposed project to aesthetics and community character, land use patterns, biological resources, greenhouse gas emissions and sequestration, and other environmental resources, including the potential for development to occur with no on-site retention of trees or woodland
- The effectiveness of the in-lieu fee in conserving oak woodlands
- The effectiveness of tree planting as mitigation and performance standards for such mitigation
- The environmental effects of the exemptions included in the ORMP (such as the exemption from oak woodland mitigation for agricultural activities)
- The environmental effects associated with the proposed Heritage Tree definition (36-inch diameter at breast height) and consideration of reducing the Heritage Tree size
- The internal integration of biological resource objectives and policies and appropriate protection for special status species
- Potential habitat fragmentation impacts, particularly along the Highway 50 corridor
- Consideration of mechanisms and procedures for mitigation monitoring
- Requests for clarification of definitions and terms
- The relationship of the proposed Biological Resources Policy Update and ORMP project to the Targeted General Plan Amendment/Zoning Ordinance Update (TGPAZOU) and the degree to which policy changes under the TGPAZOU would alter or influence the environmental impacts of the Biological Resources Policy Update and ORMP
- The consistency of the proposed Biological Resources Policy Update and ORMP with other portions of the General Plan and the 2004 General Plan EIR

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- The degree to which the project would result in or contribute to land use development within the county, and the related contribution to environmental impacts, such as increased traffic and noise, decreased air and water quality, and increased demand for public services
- The cultural significance of oak trees and oak woodlands
- Soil erosion, soil stability, and water quality effects associated with tree removal
- Potential release of naturally occurring asbestos during tree removal
- Consideration of the role of the natural regeneration of oak trees and woodlands in the impact analysis

Several NOP comments also raised concern that the proposed draft ORMP prohibits conservation within Community Regions and Rural Centers and suggest the EIR should consider whether allowing conservation in these areas would help lessen environmental effects. To clarify, consistent with Board direction on Decision Point 6 (provided at the February 23, 2015 workshop), the ORMP allows for conservation to occur anywhere that the conservation criteria in ORMP Section 4.3 can be met. The ORMP refers specifically to Community Regions and Rural Centers in ORMP Section 4.1, which identifies that these areas were excluded from the County's Priority Conservation Areas (PCAs).

Other NOP comments raised concern that the in-lieu fee amount identified in the draft ORMP has been calculated based on costs for lands only within the PCAs, and that this would result in a fee that is not sufficient to mitigate impacts county-wide. As described in the draft In-Lieu Fee Nexus Study, the fee amount was calculated by translating actual recent and/or current acquisition and management and monitoring costs incurred by Land Conservation Organizations that are actively conserving oak woodland resources or other tree-dominated habitat to a "per-acre" unit cost.

3.0 DRAFT ENVIRONMENTAL IMPACT REPORT

Based on review of the comments provided at the May and June Board hearings and in response to the NOP, Dudek anticipates that the EIR will address the following considerations.

1. Growth and Development projections for El Dorado County: The EIR will discuss and document the growth and development projected to occur within El Dorado County in the near term, long term, and at full buildout of the General Plan.

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2. General Plan Update: The EIR will discuss each potential project impact in the context of the adopted General Plan and zoning ordinance as well as in the context of the County's Targeted General Plan Amendment and Zoning Ordinance Update (TGPA-ZOU).
3. Impacts to Biological Resources: The EIR chapter evaluating impacts to biological resources will consider the following discrete issues raised in public comments:
 - a. Provide a clear and explicit definition of oak woodland, consistent with state law and standard biological habitat nomenclature
 - b. Quantify impacts to habitat types, including oak woodlands, from the projected growth and development in the County
 - c. Define the criteria and thresholds by which the significance of impacts are determined
 - d. Evaluate the adequacy of the proposed General Plan policies in avoiding, reducing, and compensating for impacts to special-status species
 - e. Evaluate potential impacts related to habitat fragmentation, particularly as a result of development along the Highway 50 corridor
 - f. Discuss the degree to which natural regeneration could offset development impacts to oak woodlands
 - g. Evaluate the viability of planting acorns and various tree container sizes as mitigation for impacted trees and woodlands
 - h. Evaluate the specific environmental effect of each exemption in the draft OWMP
 - i. Describe the mechanisms and process by which the in-lieu fee would be implemented and used and the requirements for monitoring and reporting to ensure that mitigation is implemented appropriately and successfully
4. Aesthetics: The EIR will evaluate the potential adverse aesthetic impacts related to removal of biological resources, including oak trees and woodlands, under the proposed biological resources policies and draft ORMP and the degree to which the mitigation requirements in the policies and ORMP reduce or avoid those effects. The effect of

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applying different retention standards and replacement tree planting requirements would be evaluated as project alternatives.

Several comments suggest that the scope of the EIR should be expanded to include several resource topics that are not currently anticipated to be evaluated in the EIR. Additional discussion will be provided in the EIR and appendices to support the determination that the project would not affect certain resources.

4.0 DRAFT OAK RESOURCES MANAGEMENT PLAN

To address a range of comments and questions regarding the draft ORMP, this section provides information regarding the definition of oak woodland (item 1), Dudek's recommended revisions to clarify the draft ORMP (items 2 through 6), and Dudek's recommended considerations for additional revisions and potential EIR project alternatives (items 7 through 9).

1. The draft ORMP relies on the definition of "oak woodland" that is presented in the 2001 Oak Woodland Conservation Act, codified in Section 1361 of the California Fish and Game Code. This definition states that "'oak woodlands' means an oak stand with a greater than 10 percent canopy cover or that may have historically supported greater than 10 percent canopy cover." There have been several questions regarding this definition and how it is applied. In typical practice, a qualified professional analyzes site maps and aerial photographs and conducts a field assessment to define the boundaries of an oak woodland. This analysis allows the professional to delineate the boundaries of different vegetation community types, including oak woodlands. If, as determined during data review and field evaluations, an oak-dominated stand of trees has a canopy extent that covers 10% or more of the ground surface area within that stand, it would be classified as an oak woodland. If the canopy extent is less than 10%, then the area would be classified as a different vegetation community type (e.g., savannah, grassland).

Comments have also been received that seek to clarify the term "historically" included in the oak woodlands definition. The 2001 Oak Woodlands Conservation Act emphasizes the importance of conserving oak woodlands in the state that are threatened by impacts resulting from development, firewood harvesting, and agricultural conversion. The inclusion of this language in the code is not specifically discussed, but was likely included to provide protection for stands of trees that would at one time have been classified as oak woodlands, but were subject to a level of tree removal that resulted in the stand having a canopy cover of less than 10%.

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Based on comments provided by the Board, Planning Commission and the public, Dudek recommends that the following items be clarified and/or updated in the revised draft Oak Resources Management Plan (ORMP)

2. Revise Section 2.1 of the draft ORMP to categorize the listed exemptions into numbered report sections for easier reference. This would replace the current bullet list in Section 2.1, which is more difficult to reference.
3. Clarify the exemption for fire safe activities in the draft ORMP so that it is clear that oak resources impacts incurred for maintenance of defensible space for existing structures is exempt. Oak resources impacts for new development, including initial defensible space establishment, are not proposed to be exempt and such impacts would be evaluated as part of the development review process. Similar to existing structures, maintenance of that defensible space thereafter would be exempt from oak resources impact mitigation requirements.
4. Revise the draft ORMP to eliminate the oak woodland exemption for ministerial activities. Ministerial activities include those that may be subject to a county permit (such as a building or grading permit) but are not subject to the County's discretionary review and conditional approval (such as a use permit). Discussion by the Board during the June 22 workshop indicated concern that the provision in the draft ORMP that exempts ministerial activities from the oak woodland mitigation requirements could lead to confusion, inequity, and increased impacts. Revising the draft ORMP to exclude this exemption would result in both the oak woodland and individual oak tree impact mitigation requirements being applied equally to discretionary and ministerial actions that are not otherwise exempt.
5. Clarify the draft ORMP regarding exemptions for diseased trees. The draft ORMP exempts "native oak tree removal when the tree exhibits high failure potential with the potential to injure persons or damage property, as documented in writing by a Certified Arborist or Registered Professional Forester." Dudek recommends that the draft ORMP be revised to clarify that this exemption applies to "dead, dying, and diseased trees" with the same documentation requirement.
6. Revise the draft ORMP to clarify that when a project applicant that independently negotiates purchase of a conservation easement with a willing seller to mitigate impacts, the applicant would still be responsible for paying the Management and Monitoring components of either the Oak Woodland In-Lieu Fee or the Individual Oak Tree In-Lieu

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Fee to the County unless the applicant also independently negotiates acceptance of the conservation easement management and monitoring with a land conservation organization approved by the County. The draft ORMP requires that the conservation easement be in favor of the County or County-approved conservation organization; payment of these fee components would be necessary to ensure funding for management, maintenance, and administration of the easement.

In response to further comments provided by the Board, Planning Commission and the public, Dudek recommends the following for consideration by the Board.

7. Retention Requirements:

There have been several comments and discussion by the Board regarding whether the ORMP should include a minimum oak resource retention requirement. The following discussion reviews current and past county retention policy and provides a recommendation for addressing concerns regarding a minimum retention standard in the EIR.

As described in the following paragraphs, a range of policies addressing oak woodland retention and replacement requirements have been in place or considered for El Dorado County.

Current General Plan Policy 7.4.4.4 identifies two options for mitigating oak woodland impacts. The first option (Option A) outlines oak woodland retention standards, requires retention based on these standards, and requires replacement of the impacted area at a 1:1 ratio. The retention standards range from 60% to 90% of the existing oak canopy on a given project site. As noted in Section 1.A of the 2008 Oak Woodland Management Plan (OWMP), Option A in Policy 7.4.4.4 is “designed to encourage retention of existing oak canopy in areas planned for development.” The second option (Option B) in the existing policy requires payment of an in-lieu fee to mitigate for oak woodland impacts (both direct impacts and indirect impacts due to habitat fragmentation). Under this option, the in-lieu fee payment is based on a 2:1 ratio. Option B of Policy 7.4.4.4 does not require any amount of retention and therefore does not preclude removal of 100% of the oak woodlands from a site. This is noted in Section 2.E. (page 9) of the OWMP, which states “Option B does not require the retention of a minimum percentage of oak canopy on-site.” Additionally, in Section 2.F., the OWMP states “An applicant for a development project may comply with the provisions of Policy 7.4.4.4 by meeting the retention and 1:1 replacement requirements of Option A, providing off-site mitigation through the

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payment of the OWMP fee as established by the OWMP and the implementing fee ordinance, or a combination of the two provisions.”

Under the 1996 General Plan, Policy 7.4.4.4 established standards for the “percent of canopy cover to be retained **or** [emphasis added] replaced.” As in the 2004 General Plan, the “retain or replace” requirements ranged from 60% to 90% based on a property’s baseline canopy coverage. The 1996 General Plan Policy 7.4.4.4 was not implemented. Specifics related to “replacement” were to be addressed in the Zoning Ordinance Update following the adoption of the 1996 General Plan.

Additionally, Mitigation Measure 5.12-1(f) in the 2004 General Plan EIR required oak woodland retention/replacement (Option A) or in-lieu fee payment at a 2:1 ratio (Option B); however, under this Mitigation Measure, the Option B mitigation was to be calculated based on the acreage of all on-site woodlands, not just those impacted.

Consistent with the 2008 OWMP, the current draft ORMP does not include a minimum retention requirement. The replacement requirements proposed in the draft ORMP are intended to incentivize onsite retention by requiring a higher mitigation ratio when a greater percentage of existing oak woodland is impacted. In discussing whether to add a minimum retention requirement to the ORMP, concerns raised by the Board have included the potential to render a property undevelopable which may lead to claims of property taking, the effectiveness of a retention standard in reducing impacts, and the need for any such standard to avoid unnecessary restrictions on economic development opportunities in the County.

Regarding the property takings concern, Dudek recommends that should a minimum retention requirement be considered, it should include language allowing for exemptions from the requirement in cases where the requirement would restrict reasonable use of the property.

Regarding the other concerns, Dudek recommends that one or more minimum retention standards be considered for analysis as project alternatives in the EIR, as discussed in Section 6.0 of this memo, Draft Environmental Impact Report Alternatives. While an EIR alternatives analysis is typically presented at a lower level of detail than the proposed project, a more detailed analysis (commonly called an equal-weight or co-equal analysis) can be prepared to provide a complete environmental analysis of a project alternative. Preparing an equal-weight analysis of one or more retention standards alternatives would provide the Board with information regarding the ability of a retention standard to reduce

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or avoid potentially significant impacts to oak resources. Based on the results of an equal-weight analysis in the EIR, the Board would have the opportunity to revise the retention standard in the ORMP prior to adoption, if desired. Dudek's scope of work includes consideration of up to three project alternatives in the EIR, including the no project alternative at a comparative level of detail. Analysis of any additional alternatives and/or of any equal-weight alternatives would necessitate additional time and budget.

8. Replacement Tree Sizes:

During its June 22, 2015 hearing, the Board requested further clarification and discussion on the potential for allowing different sized container trees to be planted for mitigation. Currently, the draft ORMP requires individual native oak trees to be replaced with 15-gallon sized trees and allows replacement planting for oak woodland mitigation to utilize a variety of smaller sized containers (1-gallon (or equivalent)) or acorns (with a 3:1 replacement ratio). Based on the Board's request, further research was completed regarding standard replacement tree container sizes, establishment success, and pricing.

The draft ORMP includes requirements to mitigate impacts to individual native oak trees on an inch-for-inch basis. The inch-for-inch replacement requirement in the draft ORMP was taken directly from General Plan Policy 7.4.5.2. The typical trunk diameter of a 15-gallon nursery stock oak tree is one inch. The requirement in the draft ORMP that a 15-gallon sized tree be used for replacement planting of native oak trees originates in the 2004 General Plan EIR, which states that "the replacement requirement shall be calculated based on an inch-for-inch replacement of removed oaks and shall consist of a minimum 15-gallon tree."

In addition to 15-gallon sized containers, other typical replacement oak tree container sizes include TreePot 4 (volumetrically equivalent to a 1-gallon container but with a narrower and deeper shape), 1-gallon, and 5-gallon. One of the most important components to consider in container size and shape is the fact that oak trees are taprooting species. Oak taproots typically reach the bottom of planting containers before shoots emerge from the soil surface, therefore, seedlings can become container-bound if left too long in containers¹, which may adversely affect post-planting root establishment and successful adaptation to the planting site². In nurseries, oak seedlings are "upsized"

¹ Hobbs, T. and Young, T.P. 2001. Growing Valley Oak. *Ecological Restoration*. 19:3.

² Young, T.P. and Evans, R.Y. 2005. Initial mortality and root and shoot growth of valley oak seedlings outplanted as seeds and as container stock under different irrigation regimes. *Native Plants Journal* 6.1: 83-90.

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into larger containers as they grow (e.g., from 1-gallon to 5-gallon, from 5-gallon to 15-gallon). Smaller containers are used more commonly as revegetation or restoration plantings and larger containers used more commonly in landscape projects.

Acorn and oak seedling (1-gallon and smaller) establishment success has been well-documented in field research, with several studies noting the successful establishment of planted oak seedlings in northern California sites^{3,4,5}. In some cases, acorns and smaller containers can outgrow larger container-sized trees⁶, primarily due to taproot development being more successful as it is not inhibited by excessive time in containers. In the study by McCreary⁷, blue oak acorns and 4-month-old seedlings outgrew 1-year-old seedlings over a 4-year period once planted. The variation in seedling container sizes allows for flexibility in oak tree replacement projects that need to consider soil type, maintenance needs, access, and available irrigation.

While successful establishment and variation in growth rates of different size and age oak seedlings has been documented, no published research was found that directly compares the growth rates of 1-gallon or 5-gallon oak seedlings with growth rates for 15-gallon sized oak trees. Although anecdotal evidence indicates that smaller planting stock can catch up to larger planting stock once planted, published research cannot support an assumption that a 1- or 5-gallon seedling would grow to or surpass the size of 15-gallon sized tree over the same time period once planted.

Under the inch-for-inch replacement ratio, the Board could allow for flexibility in container size requirements by establishing variable replacement ratios based on the typical trunk diameter of seedlings in various containers. To evaluate this potential approach, local restoration nurseries in the greater Sacramento area and in-house habitat restoration staff with experience propagating and growing native oak trees were contacted to discuss container tree sizes, ages, and costs. Based on typical trunk diameter measurements for each container size, Table 1 identifies a mitigation ratio that identifies

³ McCreary, D. 2009. Regenerating Rangeland Oaks in California. University of California Agriculture and Natural Resources, Publication 21601e.

⁴ McCreary D. and Lippitt, L. 1997. Producing blue oak seedlings: Comparing mini-plug transplants to standard bareroot and container stock. Pp. 253-254 in USDA Forest Service General Technical Report PNW-389.

⁵ McCreary, D. 1991. Artificially Regenerating Native Oaks in California. Oaks 'n' Folks - Volume 6, Issue 3 - December 1991.

⁶ McCreary, D. 1996. The effects of stock type and radicle pruning on blue oak morphology and field performance. *Annales des Sciences Forestieres*. 53:641-648.

⁷ McCreary, D. 1996. The effects of stock type and radicle pruning on blue oak morphology and field performance. *Annales des Sciences Forestieres*. 53:641-648.

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the number of trees at each container size necessary to provide one-inch of trunk diameter replacement. A summary of container sizes, trunk diameters, ages, costs, and calculated replacement ratios is presented in Table 1.

**Table 1
Summary of Potential Replacement Tree Sizes**

Container Size	Typical Trunk Diameter (in.)	Age	Per-Inch Ratio	Median Unit Cost
Acorn	n/a	0-6 months	3.0	n/a
1-gallon/TreePot 4*	0.50	6 months-1 year	2.0	\$7.98
5-gallon	0.75	2-3 years	1.5	\$23.48
15-gallon	1.0	3+ years	1.0	\$60.00

*A TreePot 4 is a container designed for taprooting species (e.g., oaks) that measures 4-inches square at its top and is 14 inches deep. Its cubic inch measurement (224 cubic inches) equates to 0.97 gallons.

Under the inch-for-inch replacement approach, planting requirements could be based on the ratios in Table 1. For example, mitigation required for a 12-inch diameter oak tree could include planting 12 15-gallon trees, 18 5-gallon trees, 24 1-gallon/TreePot 4 trees, or 36 acorns. A combination of sizes could also be used to meet the inch-for-inch replacement standard. The 7-year establishment period required in the draft ORMP for replacement tree plantings would apply. This requires that the planted trees and acorns be monitored for 7 years to verify their successful establishment, and replacement planting for trees that do not successfully establish.

It is noted that use of the smaller container size trees, which results in planting of a greater number of trees, would increase the maintenance and monitoring costs. The Board would need to determine on which tree container size the in-lieu fee should be based. Table 2 provides an estimate of the per-inch in-lieu fee amount based on costs at each tree container size and the total number of trees required to mitigate for the loss of one tree diameter inch.

**Table 2
Summary of Potential Inch-for-Inch In-Lieu Fees**

Container Size	Median Unit Cost	Planting Cost	Management and Monitoring per Tree (7 Years)	Number of Trees Required Per Inch	Administration (5%)	Potential Per-Inch Mitigation Fee (rounded)
Acorn	\$0*	\$7.98*	\$56.70**	3	\$3.23	\$68.00

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Table 2
Summary of Potential Inch-for-Inch In-Lieu Fees

Container Size	Median Unit Cost	Planting Cost	Management and Monitoring per Tree (7 Years)	Number of Trees Required Per Inch	Administration (5%)	Potential Per-Inch Mitigation Fee (rounded)
1-gallon/TreePot 4	\$7.98	\$7.98	\$56.70	2	\$7.27	\$153.00
5-gallon	\$23.48	\$23.48	\$56.70	1.5	\$7.77	\$163.00
15-gallon	\$60.00	\$60.00	\$56.70	1	\$8.84	\$186.00

*It is expected that acorns would be collected at no charge and planting 3 acorns would incur labor and material costs similar to planting a 1-gallon/TreePot 4 tree (\$7.98).

**Acorn plantings would require 3 acorns per inch under this approach. Management and monitoring costs are expected to be the same as that for individual trees as the 3:1 ratio is intended to account for acorn mortality, with one live tree surviving.

Dudek recommends that use of various container tree sizes for tree replacement planting be considered as a project alternative in the EIR. Data that could support use of smaller container size trees for mitigation includes published research that has documented the feasibility of successfully planting and establishing acorns and various oak seedling sizes. Additionally, smaller sized containers (i.e., 1-gallon and TreePot 4 size) are typically used in revegetation/restoration projects and may be less likely to include container-bound trees (due to less time spent in containers), allowing them to better establish in the field. Further, use of 1-gallon size container trees would be consistent with the draft ORMP requirements for replanting as mitigation for impacts to oak woodlands.

As discussed under Item 9, Dudek further recommends that the Board consider whether the draft ORMP evaluated in the EIR as the proposed project should be modified to reflect a tree-for-inch replacement standard for individual native oak tree replacement. If the draft ORMP is modified, the Notice of Preparation for the EIR would be recirculated.

9. Individual Oak Tree Replacement Standard:

During the June 22 workshop, the Board also discussed whether the inch-for-inch replacement standard for individual native oak trees contained in the County's existing policies and the 2008 OWMP is the appropriate standard for the county. As a modification to the proposed project, the Board may consider a tree-for-inch replacement requirement. This would require that for each diameter inch of individual native oak tree removed, one oak tree of any container size (or 3 acorns) would be planted. For example, to mitigate impacts to a 12-inch diameter oak tree, a project applicant would be responsible for planting 12 trees of any container size (or paying the equivalent in-lieu

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fee). In the case of an impact to a Heritage Oak Tree, the mitigation would occur at a 3:1 ratio. For example, to mitigate impacts to a 36-inch diameter oak tree, a project applicant would be responsible for planting 108 trees of any container size (or paying the equivalent in-lieu fee). Under this approach, the 7-year management and monitoring period would still be required to ensure successful establishment of each replacement tree. Under the tree-for-inch standard, tree planting would not replace the number of diameter inches removed. However, it would require planting of the same number of trees that would have been planted under an inch-for-inch standard that requires use of 15-gallon trees. To compare the two replacement standards, mitigation for removal of one 12-inch tree under the current draft ORMP would require a project applicant to plant 12 15-gallon oak trees; under the tree-for-inch mitigation standard mitigation for the same impact would require planting of 12 trees of any container size, or 36 acorns.

Data that could support the tree-for-inch mitigation standard includes published research that has documented the feasibility of successfully planting and establishing acorns and various oak seedling sizes. Additionally, smaller sized containers (i.e., 1-gallon and TreePot 4 size) are typically used in revegetation/restoration projects and may be less likely to include container-bound trees (due to less time spent in containers), allowing them to better establish in the field.

To compare the effect of these approaches on the individual oak tree in-lieu fee, an analysis of unit costs and anticipated management and monitoring fees was conducted. Table 3 summarizes the potential per-inch mitigation fees, by container size, using the tree-for-inch approach. The fees presented in Table 3 are consistent with the approach included in the draft Nexus Study. Specifically, the median unit cost is doubled to account for planting costs and the management and monitoring costs remain unchanged from the draft Nexus Study, as those costs were calculated on a per-tree basis and are expected to remain the same. The 5% administration cost is calculated from the sum of the doubled median unit cost and the management and monitoring cost.

Because smaller sized containers (i.e., 1-gallon and TreePot 4 size) are the sizes typically used in revegetation/restoration projects and may be less likely to include container-bound trees (due to less time spent in containers), Dudek recommends that the Board consider whether the draft ORMP should be modified to establish a tree-for-inch mitigation standard with the in-lieu fee determined based on the 1-gallon/TreePot 4 container size. The tree-for-inch standard would be the lesser burden for applicants. If the Board finds that this is a reasonable approach to achieving a balance between the County's objectives for resource protection and economic development, the draft ORMP

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could be modified to establish the tree-for-inch replacement standard as the proposed project. As discussed under Section 6.0, if the impact analysis finds that this replacement standard would not reduce impacts to a less than significant level, the EIR could include additional consideration of other replacement standards (inch-for-inch) and use of other container sizes to establish the in-lieu fee amount as mitigation measures and/or project alternatives.

Table 3
Summary of Potential Tree-for-Inch In-Lieu Fees

Container Size	Median Unit Cost	Planting Cost	Management and Monitoring (7 Years)	Administration (5%)	Potential Per-Inch Mitigation Fee (rounded)
Acorn	\$0*	\$7.98*	\$56.70**	\$3.23	\$68.00
1-gallon/TreePot 4	\$7.98	\$7.98	\$56.70	\$3.63	\$76.00
5-gallon	\$23.48	\$23.48	\$56.70	\$5.18	\$109.00
15-gallon	\$60.00	\$60.00	\$56.70	\$8.84	\$186.00

*It is expected that acorns would be collected at no charge and planting 3 acorns would incur labor and material costs similar to planting a 1-gallon/TreePot 4 tree (\$7.98).

**Acorn plantings would require 3 acorns per inch under this approach. Management and monitoring costs are expected to be the same as that for individual trees as the 3:1 ratio is intended to account for acorn mortality, with one live tree surviving.

5.0 DRAFT OAK RESOURCES IN-LIEU FEE NEXUS STUDY

In consideration of comments received from the public, the Board, and County staff, Dudek and New Economics & Advisory recommend that the appeals section be removed from the draft In-Lieu Fee Nexus Study and added to the ORMP.

Further, the Nexus Study would be updated to reflect any Board direction provided in response to Items 8 and 9 in Section 4.0 of this memo. The revised draft Nexus Study would be circulated for public review at the same time as the Draft EIR.

6.0 DRAFT ENVIRONMENTAL IMPACT REPORT ALTERNATIVES

CEQA Requirements for Alternatives Analysis

CEQA requires that an EIR evaluate project alternatives that could reduce or avoid the proposed project’s significant impacts. This is a critical component of the EIR in support of CEQA’s goals to foster informed decision making and public participation (14 CCR 15126.6(a)).

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Specifically, the CEQA Guidelines, state that EIRs must “describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives” (14 CCR 15126.6(a)). In addition, the Guidelines provide the following direction for shaping the alternatives analysis:

- “The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making” (14 CCR 15126.6(f)).
- Alternatives should be considered even if they “would impede to some degree the attainment of the project objectives, or would be more costly” (14 CCR 15126.6(b)).
- An EIR must evaluate “only those alternatives necessary to permit a reasoned choice” (14 CCR 15126.6(f)) and does not need to consider “every conceivable alternative” to a project (14 CCR 15126.6(a)).
- The alternatives evaluated should be “potentially feasible” (14 CCR 15126.6(a)), but inclusion of an alternative in an EIR does not constitute definitive evidence that the alternative is in fact “feasible.” The final decision regarding the feasibility of alternatives lies with the decision makers for a given project who must make the necessary findings addressing the feasibility of alternatives for avoiding or substantially reducing a project’s significant environmental effects (California Public Resources Code, Section 21081; see also 14 CCR 15091).
- An EIR is not required to evaluate the environmental impacts of alternatives at the same level of detail as the proposed project, but it must include enough information to allow meaningful evaluation, analysis, and comparison with the proposed project (14 CCR 15126.6(d)).
- CEQA allows that some project alternatives may be initially considered but ultimately rejected from analysis in the EIR if the alternative is not capable of meeting the basic project objectives and/or not likely to reduce one or more of the project’s significant environmental effects (14 CCR 15126.6(c)).

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Biological Resources Policy Update and ORMP EIR Alternatives Analysis

Based on review of the public and Board comments throughout the Biological Resource Policy Update and ORMP process, particularly those provided at the May and June Board hearings and comments received on the NOP, Dudek anticipates the following considerations will inform the EIR, and particularly the alternatives analysis. There are several ways in which these topics can be incorporated into the EIR – as alternatives selected for analysis in the Draft EIR, as alternatives that are initially considered but rejected from further analysis, and as mitigation measures. Further, for those alternatives that are selected for analysis, the analysis can be conducted as a comparative analysis demonstrating the impacts of the alternative relative to those of the proposed project, or as an equal-weight analysis that quantifies the impacts of project alternative in the same level of detail as the analysis of the proposed project impacts. Dudek’s scope of work includes consideration of up to three project alternatives in the EIR, including the no project alternative at a comparative level of detail. Analysis of any additional alternatives and/or of any equal-weight alternatives would necessitate additional time and budget.

As provided in the CEQA Guidelines, the identification of project alternatives will reflect the EIR determinations regarding the project’s significant impacts. They must also reflect the County’s objectives for resource management as well as the public comments received on the project and the NOP. Any alternatives that are initially considered in the EIR preparation but are not carried forward for detailed analysis will be described, along with the basis for the decision to omit such alternatives from the detailed analysis.

1. No Project: CEQA requires that the EIR include consideration of the No Project Alternative. This would be defined as continued implementation of the existing General Plan policies, including the oak canopy retention standards (Option A) and in-lieu fee (Option B) in Policy 7.4.4.4, inch-for-inch tree replacement using 15-gallon container trees, and completion of the Integrated Natural Resources Management Plan as required in Policy 7.4.2.8.
2. Tree Replacement Standards: In consideration of the Board’s June 22, 2015 action, Board discussion throughout the Biological Resources Policy Update and ORMP process, and public comment, items 8 and 9 in Section 4.0 of this memo provide the Board with additional information to support the Board’s selection of a tree planting mitigation standard to include in the draft ORMP, and therefore the proposed project. One or more project alternatives could consider alternate replacement standards if such standards could result in reducing or avoiding significant impacts that would occur under the

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proposed project. For example, if the Board directs that the draft ORMP should be revised to require replanting with 1-gallon container trees, the EIR alternative could consider whether impacts would be reduced if the requirement were increased to 5-gallon containers.

3. Retention Standards: One or more project alternatives could consider adding a minimum retention standard to the draft ORMP. Selection of a specific retention standard to be evaluated should reflect the County's objectives for General Plan implementation, and may include the Board's consideration of one or more specific minimum retention standards as a percentage of the existing oak woodland on a site or a sliding scale of retention similar to existing policy Option A, the requirements of the 1996 General Plan Policy 7.4.4.4, or another retention standard. In addition, as warranted through the environmental impact analysis, the EIR may recommend minimum retention standards in certain locations (such as near Highway 50 to address concerns regarding habitat fragmentation, or in areas outside the mapped Priority Conservation Areas and Important Biological Corridors). The analysis of a retention standard alternative would also include consideration of the degree to which minimum onsite retention could reduce or avoid adverse effects associated with habitat loss and fragmentation.
4. Conservation Standards: In response to NOP comments, the EIR will consider whether the minimum acreage requirements in the conservation standards should be reduced or omitted. This would be an alternative to the proposed ORMP requirement that "Land or conservation easement acquisition as mitigation of oak woodland impacts that occurs outside of PCAs shall occur on minimum contiguous habitat blocks of 5 acres" and the requirement in proposed Policy 7.4.2.8.D that "Mitigation for impacts to vegetation communities defined above in Section A will occur within the County on a minimum contiguous habitat block of 5 acres."
5. Habitat Fragmentation/Wildlife Movement: Comments provided on the NOP have included suggestions that the EIR should consider omitting the Important Biological Corridors (IBC) designation and applying requirements regarding wildlife movement county-wide to address concerns of equal treatment for all property owners. The analysis of alternatives that expand or alter requirements related to wildlife movement impacts would include consideration of the degree to which habitat loss and fragmentation could adversely affect wildlife movement and survival. Other NOP comments have suggested that project alternatives should consider more stringent requirements in the Highway 50 corridor due to the habitat loss and fragmentation associated with the development pressure in this area, such as requiring a combination of on-site mitigation and payment

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of the in-lieu fee. Additionally, the EIR will consider whether mechanisms to require that mitigation locations be determined in part based on the location of the impact would be effective at reducing impacts.

6. Special-Status Species: The EIR will consider whether additional policy revisions are necessary to protect special-status species, particularly those other than the Pine Hill preserve plants.

7.0 BOARD DIRECTION

This memo provides a summary of the NOP comments and a discussion of how those comments will be addressed in the Draft EIR. No specific direction is requested from the Board on sections 2.0 and 3.0 of this memo.

Section 4.0 of this memo offers suggestions for clarification of the ORMP (items 2 through 6) and presents an analysis of options for alternative replacement tree sizes and replacement standards for impacts to individual native oak trees (items 7 through 9). Dudek requests direction from the Board regarding whether or not to make the edits suggested in items 2 through 6 and whether to modify the draft ORMP tree replacement standards for impacts to individual native oak trees as discussed in items 7 through 9. This includes considerations of issues raised in the Board's June 22, 2015 action regarding retention standards, options for tree planting mitigation, and oak resource mitigation requirements related to discretionary and ministerial projects. It also includes a recommended minor format revision and issues raised in public comments, such as concerns regarding the draft ORMP oak woodland mitigation exemptions.

Section 5.0 of this memo offers a suggestion to delete the appeals section from the Oak Resources In-Lieu Fee Study. Dudek requests direction from the Board regarding whether or not to make the edit suggested in that section. Section 5.0 also notes that additional revisions to the Fee Study would be necessary if the Board directs that the tree replacement standards in the draft ORMP should be revised.

Section 6.0 of this memo outlines several potential project alternatives that could be evaluated in the EIR. Dudek requests Board discussion and direction regarding:

1. specific retention standards and tree replacement standards that may be appropriate to include in the alternatives analysis;
2. whether there are other alternatives that should be considered, and

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3. whether any project alternatives should be considered at an equal level of detail as the proposed project. Dudek's scope of work includes consideration of up to three project alternatives in the EIR, including the no project alternative at a comparative level of detail. Analysis of any additional alternatives and/or of any equal-weight alternatives would necessitate additional time and budget. CEQA requires that the Board adopt all feasible mitigation measures and alternatives that substantially reduce or avoid the project's significant impacts. In other words, if the proposed project is found to result in a significant and unavoidable impact and a feasible project alternative that meets most of the basic project objectives is found to reduce that impact to a less than significant level (while also not resulting in any new or more severe impacts), CEQA directs that the Board should adopt that alternative. Analysis of an equal-weight alternative would include a detailed impact analysis for that alternative, which would provide the necessary environmental review to allow the Board to adopt either the proposed project or the alternative, as appropriate based on the impact analysis.