

1 Opinion by Kellington.

2 **NATURE OF THE DECISION**

3 Petitioner appeals an order of the board of
4 commissioners approving an application for a nine lot
5 subdivision and a conditional use permit for a variable
6 density allowance.

7 **MOTION TO INTERVENE**

8 Jack Beaton and William Ryder move to intervene on the
9 side of respondent in this appeal proceeding. Petitioner
10 does not object to the motion, and it is allowed.

11 **FACTS**

12 The subject property is zoned Open Space Reserve (OSR),
13 and consists of 94.92 acres. The OSR zone permits approval
14 of one single family residential dwelling on each 20 acres
15 of OSR zoned land. In addition, under the OSR conditional
16 use provisions, the county may approve a dwelling on each 10
17 acres of OSR zoned land. The increased density allowed
18 under these conditional use provisions requires a
19 conditional use permit and is called a "variable density
20 allowance." Because nine lots are being created,
21 subdivision approval is also required.

22 The subject property abuts Corp Ranch Road. Corp Ranch
23 Road is developed with residences, including a residential
24 subdivision consisting of 5 to 12 acre homesites. Emigrant
25 Lake Reservoir and an associated county park are located to
26 the east and south of the subject property. A large ranch

1 is located to the north of the property.

2 Intervenor-respondent (intervenors) applied for
3 subdivision approval and a conditional use permit for a
4 variable density allowance to authorize the creation of the
5 proposed nine residential lots on the property. The
6 proposal also includes construction of a bridge to cross a
7 stream bed on the property, and to cross all or a portion of
8 a 200 foot wide water overflow easement running north/south
9 along the stream bed. The 200 foot water overflow easement
10 accommodates the emergency overflow of Emigrant Lake
11 Reservoir flood waters from a spillway located approximately
12 one fifth of a mile to the south of the subject property.
13 The spillway allows water to be released from Emigrant Lake
14 Reservoir when the depth of the water in the reservoir is
15 one foot over "maximum pool." Record 52.

16 The planning commission denied intervenors'
17 applications. Intervenors appealed to the board of
18 commissioners. The board of commissioners reversed the
19 decision of the planning commission and approved the
20 applications. This appeal followed.

21 **ASSIGNMENT OF ERROR**

22 "The Jackson County Board of Commissioners erred
23 in [its] evaluation of facts presented in the
24 public hearing process on the Conditional Use
25 Permit/Subdivision application of Jack Beaton and
26 William Ryder * * * in concluding * * * that the
27 location, size, design and operating
28 characteristics of the proposed use will have
29 minimal adverse impact on the livability, value,
30 or appropriate development of abutting properties

1 and the surrounding area."

2 Petitioner challenges the county's decision on the
3 basis that it fails to comply with Jackson County Land
4 Development Ordinance (JCLDO) 260.040(2),¹ which requires:

5 "That the location, size, design, and operating
6 characteristics of the proposed use will have
7 minimal adverse impact on the livability, value,
8 or appropriate development of abutting properties
9 and the surrounding area."

10 Petitioner argues the evidence in the record does not
11 establish compliance with JCLDO 260.040(2) in two respects.
12 First, petitioner contends the evidence establishes that the
13 addition of nine new domestic water wells to the Corp Ranch
14 Road area will have more than minimal adverse impact on
15 groundwater quantity in the area.

16 Second, petitioner argues the evidence establishes that
17 the construction of a bridge to accommodate a 50 year flood
18 event, as required by the challenged order, could force
19 flood water which should otherwise flow within the overflow
20 easement to exceed the boundaries of that easement.²

¹Petitioner also challenges the county's decision on the basis that it fails to comply with Jackson County Comprehensive Plan (plan) Policy 5. With one exception not relevant to this appeal, nothing in the wording or context of plan policy 5 indicates that policy 5 is a mandatory standard for approval of the proposal. Consequently, whether the challenged decision complies with this policy provides no basis for reversal or remand. Bennett v. City of Dallas, 17 Or LUBA 450, aff'd 96 Or App 645 (1989).

²There is apparently no dispute that a bridge designed to accommodate a 50 year flood event, as required by the county's order, would be adequate to allow emergency vehicles to reach area homes during such an event.

1 Petitioner states it is impossible to tell how much water is
2 expected from a 50 year flood event because neither the
3 challenged order nor the record establish this figure.
4 Petitioner alleges that if flood water exceeds the
5 boundaries of the overflow easement, it will have more than
6 minimal adverse impact on the livability and appropriate
7 development of the area because it would result in the
8 unwanted trespass of flood water onto neighboring property.

9 We address petitioner's arguments separately below.

10 **A. Groundwater Quantity**

11 The challenged decision concludes that before final
12 approval, the applicant must establish that each of the
13 proposed nine lots will be served by a domestic water well
14 producing a minimum of 2.5 gallons of water per minute. The
15 only findings addressing the groundwater issue are the
16 following:

17 * * * The neighbors expressed concerns regarding
18 the reduced availability of groundwater in this
19 area. Several homeowners have noted that their
20 water levels have dropped with the addition of new
21 wells in the area, and fear that the addition of
22 nine new wells will increase this problem. The
23 only requirement in the [JCLDO], with reference to
24 wells, is that the subdivider must provide
25 documentation that wells exist for each lot, with
26 a minimum 2.5 gallons per minute capacity, prior
27 to approval of the final map. From information
28 submitted by property owners in the area, well
29 depths in the * * * area vary from 149 to 563
30 feet. Gallons per minute [gpm] on those wells
31 also vary, from 1/8 to 75 gpm. Property owners
32 provided statistics on the reduction in the well
33 water over the past 16 years on wells in the
34 [area], with some wells now below the 5 [gpm]

1 required for financing.

2 "The applicant provided information on the well
3 already drilled on the property. The well is 205
4 feet deep and has been air tested at 70 [gpm]. *
5 * * [T]he well driller who drilled this well and
6 others in the area testified that the Corp Ranch
7 Road area is a perch zone, with water entrapped in
8 the bedrock. [He] stated that this trapped water
9 does not recharge as quickly as the water is
10 removed. The applicant further stated that they
11 will provide wells for the proposed parcels which
12 will supply a minimum of 5 [gpm] per lot, and that
13 these wells will be drilled and tested prior to
14 the submittal of the final subdivision plat.

15 "* * * The Board of Commissioners find[s] that
16 groundwater geology in Jackson County and in the
17 Corp Ranch Road area is complicated. The
18 applicant has agreed to exceed the [JCLDO]
19 requirements by providing evidence of wells which
20 exceed 5 [gpm] for each of the nine parcels in
21 this subdivision. This well water report will be
22 submitted with the final plat for the
23 subdivision." (Emphasis supplied.) Record 5-6.

24 Our review is somewhat complicated by the above
25 emphasized language in the decision which strongly suggests
26 the county did not believe the proposal's effect on
27 groundwater availability in the area is relevant to
28 determining compliance with JCLDO 260.040(2) (that the
29 proposal will have no more than minimal adverse impact on
30 livability, value and appropriate development of the area).³
31 We see no reason why groundwater quantity is irrelevant to
32 determining whether the proposal will have more than minimal

³The order offers no explanation of why the availability of groundwater is not relevant to determining compliance with JCLDO 260.040(2).

1 adverse impact on the livability, value and appropriate
2 development of the area. See McCoy v. Linn County, 16 Or
3 LUBA 295, 300 (1987), aff'd 90 Or App 271 (1988).

4 We therefore conclude the county's findings are
5 inadequate to demonstrate compliance with JCLDO 260.040(2)
6 with regard to groundwater availability. Nevertheless, we
7 do not reverse or remand on the basis of inadequate findings
8 where parties cite evidence in the record which clearly
9 supports the challenged decision. ORS 197.835(9)(b).⁴

10 Intervenors cite the report of Douglas Woodcock, an
11 employee of the Oregon Water Resources Department (Woodcock
12 Report). The Woodcock Report generally states that the high
13 volume water producing wells in the area are pumping water
14 from fractures in the sandstone of the Payne Cliffs
15 formation, a non-marine sedimentary rock formation in the
16 area. It also states it is not always possible to find
17 water, even when one drills into this formation, because not
18 all of the sedimentary rock fractures contain water. It
19 states that if ground water is not found by drilling into

⁴ORS 197.835(9)(b) provides:

"Whenever the findings are defective because of failure to recite adequate facts or legal conclusions or failure to adequately identify the standards or their relation to the facts, but the parties identify relevant evidence in the record which clearly supports the decision or a part of the decision, the board shall affirm the decision or the part of the decision supported by the record and remand the remainder to the local government, with direction indicating appropriate remedial action."

1 the sedimentary rock in the Payne Cliffs formation, then the
2 Hornbrook Claystone formation is the next area where water
3 may be found. However, the Woodcock Report notes that water
4 wells pumping from the Hornbrook Claystone strata generally
5 produce much smaller quantities of water.

6 In addition, the Woodcock Report notes the strata of
7 both the Payne Cliffs and Hornbrook Claystone formations are
8 broken up or compartmentalized such that there are fractures
9 through which ground water flows, bounded by rock with no
10 fractures or by rock containing "intrusive dikes." This is
11 due, in part at least, to ancient volcanic activity in the
12 area. As we understand it, according to the Woodcock
13 Report, these features are characteristic of both formations
14 and make water flow in the area nonuniform, and results in a
15 poor ground water flow system overall in the Corp Ranch Road
16 area. As we read the Woodcock Report, it concludes this
17 compartmentalized characteristic of the two formations, and
18 the fact that groundwater is contained in certain of the
19 sedimentary rock fractures but not others, makes the
20 groundwater in the area unpredictable to locate in the first
21 place, or to track once it is found.

22 The report also states the groundwater in the Hornbrook
23 Claystone formation does not recharge quickly, but that
24 groundwater recharge is quicker in the wells pumping from
25 the sedimentary rock usually found in the Payne Cliffs
26 formation. However, the Woodcock Report maintains that

1 despite this quick recharge characteristic one would
2 normally expect to find with wells pumping ground water from
3 water in sandstone fractures, water well readings from
4 sandstone fractures in the Corp Ranch Road area indicate:

5 "* * * that the aquifer is being overdrafted and
6 aquifer storage (not well storage) is being
7 depleted.

8 "The depletion of the ground water in the area is
9 caused exclusively by domestic use with small lawn
10 and garden watering. There are no major
11 irrigators or industry in the * * * area." Record
12 129.

13 The Woodcock Report concludes as follows:

14 "The Corp Ranch Rd landowners are concerned about
15 the proposed development of the 94 acres adjacent
16 to them. My observations of the area indicate
17 that the use of ground water in the proposed
18 development is unlikely to interfere with existing
19 uses in the area. However, if this area is
20 developed on ground water the new landowners will
21 quite likely experience the same problems,
22 possibly to an even greater degree than the Corp
23 Ranch Rd users are experiencing." (Emphasis
24 supplied.) Record 130.

25 Intervenors also cite the report of Tom Ferrero
26 (Ferrero Report), an engineering geologist. The Ferrero
27 Report states that while the geologic data for the area
28 indicates there might be two faults separating existing
29 wells in the the Corp Ranch Road area from the proposed
30 subdivision, he found no evidence of one of those faults,
31 and concluded that the other would only separate a small
32 number of the existing Corp Ranch Road wells from the
33 proposed subdivision. The Ferrero Report also states the

1 analysis conducted by the author agrees with the analyses
2 contained in the Woodcock Report. Specifically, the Ferrero
3 Report concludes:

4 "[The Woodcock Report description] of the
5 'compartmentalized' aquifers in the Corp Ranch
6 Road area is in close accordance with the data
7 that I have compiled pertaining to the area, and
8 my analysis of the local hydrogeologic conditions.
9 I also concur that the hydrogeologic conditions,
10 topography and distances between wells 'indicate
11 that the use of groundwater in the proposed * * *
12 development is unlikely to interfere with existing
13 uses in the area.'"⁵ (Emphasis supplied.) Record
14 121-122.

15 Finally, intervenors cite the testimony of a well
16 driller, John Studebaker. Mr. Studebaker essentially
17 testified that based on his experience in drilling water
18 wells in the area he believes the geology of the area is not
19 uniform. As we understand his testimony, Mr. Studebaker
20 stated he believes it to be highly unlikely that any of the
21 water wells to be drilled for the proposed subdivision will
22 have any underground connection with any of the existing
23 wells in the Corp Ranch Road area.⁶ Mr. Studebaker states

⁵Attached to the Ferrero Report is a map indicating the location of projected faults (which the Ferrero Report could not confirm), the known areas of the Payne Cliff and Hornbrook Claystone formations, and certain wells in the Corp Ranch Road area.

⁶Mr. Studebaker also stated he believes there is a natural geologic barrier between the developed homes in the Corp Ranch Road area and the proposed subdivision. However, he was imprecise regarding what this barrier is or where it is located. In view of the conflicting evidence regarding the presence and scope of the faults of the area, and based on the fact that we cannot tell if faults were what Mr. Studebaker was

1 his conclusions in this regard are based on his familiarity
2 with water wells in the area which are drilled very close to
3 one another but which (1) yield water with a different
4 chemistry, (2) have different water pressure and quantity,
5 and (3) exhibit different rock layering before water is
6 located. Further, he states that groundwater in the Corp
7 Ranch Road area is found at different depths.

8 Mr. Studebaker believes that the undisputed decline in
9 water quantity in some of the water wells in the Corp Ranch
10 Road area has occurred because those declining wells rely
11 upon groundwater "perched" in a particular geologic layer.
12 Mr. Studebaker stated that due of the nature of the material
13 which caused the water to perch in the first place, after
14 the perched water is consumed, ground water is unable to
15 recharge quickly. He stated groundwater will typically
16 recharge an area where water has perched far slower than the
17 water is needed for domestic use. However, Mr. Studebaker
18 stated that this phenomenon occurs at different rates in the
19 wells in the Corp Ranch Road area, and he also stated that
20 there are some wells in the area where this phenomenon has
21 not occurred at all.

22 Petitioner argues the Ferrero Report and attached map
23 should not be relied upon.⁷ Petitioner argues the Ferrero

referring to, we do not believe the evidence in the record "clearly supports" a determination that such a geologic barrier exists.

⁷Petitioner also contends the Ferrero Report is unreliable because it relies upon the existence of a fault separating existing domestic wells

1 Report relies upon information shown on the map, and the map
2 fails to identify four water wells close to the proposed
3 subdivision which have experienced severe declines in water
4 quantity. Finally, petitioner argues the county erred in
5 relying upon the testimony of Mr. Studebaker because he is
6 not a licensed hydrologist or geologist. Petitioner also
7 contends it is erroneous to rely upon his testimony because
8 he is the well driller who drilled the test well for the
9 proposed subdivision and, therefore, he is biased in favor
10 of approval of the proposal.⁸

11 Finally, petitioner argues the determinations in the
12 Woodcock Report regarding declines in groundwater quantity
13 produced by area wells establish that the proposed
14 subdivision will more than minimally affect groundwater

from those wells to be drilled to accommodate the proposed subdivision. She states that it is unreasonable to rely upon the presence of such a fault to prevent new wells from adversely affecting existing wells, as there are existing domestic water wells located on the proposed subdivision side of the alleged fault.

We do not read the Ferrero Report to rely upon the presence of the two faults to support its conclusions regarding groundwater quantity. As we read the report, it states that no evidence of one of the faults was found, and that the other fault does not separate all of the existing Corp Ranch Road wells from the proposed subdivision. However, as we explained, we do not believe the evidence in the record "clearly supports" a determination that any faults provide a significant geologic barrier between existing water wells in the area and the proposed subdivision.

⁸The fact that Mr. Studebaker was the well driller who drilled the test well for the proposed subdivision does not establish that his testimony is not credible. Further, Mr. Studebaker is an experienced well driller. That he is not a hydrologist or a geologist does not mean that a reasonable person would not rely upon his conclusions regarding area water wells, or his conclusions regarding the nature of the strata in the area in which water is found. See Hinzpeter v. Union County, 16 Or LUBA 111, 117 (1987).

1 levels in the area. Petitioner points out the Woodcock
2 Report determines groundwater in the Corp Ranch Road area is
3 a limited resource, and that the quantity of groundwater
4 from water wells in the area has declined at an alarming
5 rate over time. Petitioner points out the Woodcock Report
6 concludes the primary reason for such decline in water well
7 production is domestic usage exceeding the rate that
8 groundwater can recharge in such wells. Petitioner states
9 the county erroneously relied upon the unfounded conclusion
10 in the Woodcock Report that the proposed development is
11 unlikely to interfere with existing residential uses.

12 While it is a close question, we believe the evidence
13 in the record to which we are cited "clearly supports" a
14 determination that the addition of the proposed nine new
15 residences to be served by water wells will not have more
16 than minimal adverse impact on the livability, value and
17 appropriate development of the area, as JCLDO 260.040(2)
18 requires. Specifically, there is evidence in the record
19 that the groundwater in the Corp Ranch Road area is drawn
20 from either perched water areas with slow recharge ability,
21 as described by Mr. Studebaker, or through various
22 nonuniform fractures in sedimentary rock, as described in
23 the Woodcock and Ferrero Reports. Based on this evidence,
24 Woodcock, Ferrero and Studebaker all concluded that it is
25 unlikely the wells for the proposed subdivision will draw
26 from a perched area or a fracture already drawn upon by an

1 existing well. Although these experts did not explicitly
2 conclude that the wells to serve the proposed subdivision
3 will have no more than "minimal adverse impact" on existing
4 area wells, we believe their conclusions and the evidence in
5 the record clearly support such a conclusion.

6 This subassignment of error is denied.

7 **B. Proposed Bridge and the Overflow Easement**

8 The applicant proposes a bridge to provide a means of
9 crossing overflow waters from Emigrant Lake Reservoir, as
10 follows:

11 " * * * a low water type crossing which would allow
12 200 cubic feet per second to pass under a solid
13 concrete structure in twin culverts. * * *"
14 Record 4.

15 The county did not specifically approve the bridge
16 concept proposed by the applicant. Rather it stated in its
17 findings:

18 "The Board [of Commissioners] finds that there is
19 evidence that the spillway is used for overflow
20 from Emigrant Reservoir on a regular basis, and
21 that, if this overflow covered a roadway or
22 bridge, the overflow could impair the ability of
23 emergency vehicles or residents from accessing the
24 new subdivision lots, potentially jeopardizing
25 life and property. The Board finds * * *, based
26 on the testimony of the Public Works Director,
27 that if the bridge were designed, and certified by
28 an Oregon licensed engineer to accommodate a 50
29 year event, this potential jeopardy would be
30 adequately mitigated." Record 4.

31 Based upon these findings, the county imposed the
32 following condition on the proposed development:

33 "A bridge to span the spillway overflow channel

1 must be designed, and certified by the applicant's
2 Oregon licensed engineer to accommodate a 50 year
3 event. The applicant's Oregon licensed engineer
4 shall certify that the bridge meets all county
5 requirements. Such certification must be
6 submitted with the final map, and must be approved
7 by the Public Works Department." Record 15.

8 As we understand it, petitioner argues neither the
9 condition nor the order determines how much water is
10 expected to be discharged into the overflow easement area
11 during a 50 year flood event. Petitioner also argues the
12 condition provides no assurance that the bridge to be
13 constructed will not cause flood waters to trespass onto her
14 property or on other area properties, causing a more than
15 minimal adverse impact on the livability, value and
16 appropriate development of the area, in violation of JCLDO
17 260.040(2).⁹

18 Intervenors do not cite any findings determining the
19 flow of water expected in the overflow easement during a 50
20 year flood event. Similarly, there are no findings
21 regarding whether a bridge designed "to accommodate a 50
22 year [flood] event" will cause significant amounts of flood
23 water to leave the area of the overflow easement.

⁹Petitioner also suggests this condition violates the "Goal" (to protect life and property from natural disasters and hazards), and the "Introduction/Background" of the plan's "Natural Hazards Element" appended to her petition for review. However, nothing in the words or context of these provisions suggest that either was intended to apply as an independent approval standard for particular development applications. Accordingly, whether the proposal is in compliance with these plan provisions provides no basis for reversal or remand of the challenged decision. Bennett v. City of Dallas, supra.

1 We believe that whether the proposed bridge will cause
2 flood waters to exceed the water overflow easement is a
3 relevant consideration under JCLDO 260.040(2). If the
4 proposed bridge will increase the area over which the water
5 from the Emigrant Lake Reservoir emergency spillway will
6 flow, significantly beyond the overflow easement, such an
7 eventuality could have more than minimal adverse impact on
8 the livability, value and appropriate development of the
9 area. Because there are no findings addressing this issue,
10 under ORS 197.835(9)(b) we must determine whether there is
11 evidence in the record to "clearly support" such a
12 determination.

13 Intervenors argue evidence in the record establishes
14 the flow from a 50 year flood event would be adequately
15 accommodated by the proposed bridge, and that to the extent
16 the flow is not accommodated by the bridge during a 50 year
17 flood event, the bridge should not cause the flow to more
18 than minimally exceed the overflow easement.

19 The overflow easement is designed to accommodate 11,300
20 cubic feet of water per second (cfs). Record 3. The
21 testimony of Fred Phillips, the applicant's engineer,
22 estimated that in 30 years no more than 100 cfs has flowed
23 in the overflow easement. Intervenors-Respondent's Brief
24 App 7. Further, there is evidence in the record that during
25 an 80 year flood along the Rogue River and Bear Creek, no
26 water ran into the overflow easement. Record 133.

1 However, we are cited to no evidence regarding what
2 effect a bridge designed to accommodate a 50 year flood
3 event would have on expected flows in the overflow easement,
4 or whether under some circumstances such a bridge would
5 cause flood waters to significantly exceed the area of the
6 overflow easement and adversely affect neighboring
7 properties. We simply cannot tell from the record whether
8 such a bridge design would cause a significant change in the
9 configuration of overflow from Emigrant Lake Reservoir such
10 that the overflow would exceed the boundaries of the
11 overflow easement.

12 Because the evidence in the record identified by the
13 parties does not clearly support a determination that
14 placement of a bridge designed to accommodate a 50 year
15 flood event would have no more than minimal adverse impact
16 on the livability, value and appropriate development of
17 properties in the area adjoining the overflow easement, we
18 must sustain this subassignment of error.

19 This subassignment of error is sustained.

20 The assignment of error is sustained, in part.

21 The county's decision is remanded.

22