



CASTLE ROCK CITY COUNCIL AGENDA

Regular Meeting: Monday, August 11, 2025
7:30 PM

Location

Castle Rock Senior Center
222 Second Ave SW
Castle Rock, WA 98611

AGENDA

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1. CALL TO ORDER

- a. Pledge of Allegiance
- b. Roll Call
- c. Changes to Agenda

2. PROCLAMATIONS & PRESENTATIONS

- a. John Keatley - Forest Practices Proposed Rule Change and Impacts (page 3-38)

3. CITIZEN COMMENTS - maximum 3 minutes

4. DEPARTMENT REPORTS

- City Attorney Nikki Thompson
- Police Chief Charlie Worley
- Public Works Director Dave Vorse
- City Engineer Tom Gower
- Clerk-Treasurer Carie Cuttonaro

5. COUNCIL AND AD HOC COMMITTEE REPORTS

- Mayor / Mayor Pro-Tempore / Councilmembers
- CRCDA Representative

6. PUBLIC HEARINGS

7. CONSENT AGENDA

- a. July 14, 2025 Regular Council Meeting Minutes - tabled at the July 28, 2025 Regular Council Meeting (page 39-41)
- b. July 2025 invoices as described in the Fund Transaction Summary Report in the amount of \$580,161.52. (page 42-43)

8. OLD BUSINESS

9. NEW BUSINESS

- a. Ordinance No. 2025-10, an ordinance of the City of Castle Rock, Washington, amending Castle Rock Municipal Code Section 5.01.110, Nonresident Businesses, providing for severability and establishing an effective date, on first reading. (page 44-45)
- b. Request for \$50,000 for Root Cutting and Treatment. (page 46-47)

10. OTHER BUSINESS

11. ADJOURNMENT

NEXT REGULAR COUNCIL MEETINGS:

<u>3Q25</u>	<u>4Q25</u>	<u>1Q26</u>	<u>2Q26</u>
July 14	October 13	January 12	April 13
July 28	October 27	January 26	April 27
August 11	November 10	February 09	May 11
August 25	November 24	February 23	Tuesday, May 26
September 08	December 08	March 09	June 08
September 22	December 22	March 23	June 22

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City Council may add and take action on other items not listed on this Agenda.

AMENDATORY SECTION (Amending WSR 13-21-032, filed 10/8/13, effective 12/30/13)

WAC 222-30-021 *Western Washington Type S and F Waters riparian management zones. These rules apply to all ~~((typed))~~ Type S and F Waters on forest land in Western Washington, except as provided in WAC 222-30-023. RMZs are measured horizontally from the outer edge of the bankfull width or channel migration zone, whichever is greater, and extend to the limits as described in this section. See board manual section 7 for riparian design and layout guidelines.

~~*((+1))~~ **Western Washington RMZs for Type S and F Waters** have three zones: The core zone is nearest to the water, the inner zone is the middle zone, and the outer zone is furthest from the water. (See definitions in WAC 222-16-010.) RMZ dimensions vary depending on the site class of the land, the management harvest option, and the bankfull width of the stream. See tables for management options 1 and 2 below.

None of the limitations on harvest in each of the three zones listed below will preclude or limit the construction and maintenance of roads for the purpose of crossing streams in WAC 222-24-030 and 222-24-050, or the creation and use of yarding corridors in WAC 222-30-060(1).

The shade requirements in WAC 222-30-040 must be met regardless of harvest opportunities provided in the inner zone RMZ rules. See board manual section 1.

~~((+a))~~ **(1) Core zones.** No timber harvest or construction is allowed in the core zone except operations related to forest roads as detailed in this subsection ~~((+1) of this section)~~. Any trees cut for or damaged by yarding corridors in the core zone must be left on the site. Any trees cut as a result of road construction to cross a stream may be removed from the site, unless used as part of a large woody debris placement strategy or as needed to reach stand requirements.

~~((+b))~~ **(2) Inner zones.** Forest practices in the inner zone must be conducted in such a way as to meet or exceed stand requirements to achieve the goal in WAC 222-30-010(2). The width of the inner zone is determined by site class, bankfull width, and management option. Timber harvest in this zone must be consistent with the stand requirements in order to reach the desired future condition targets.

"Stand requirement" means a number of trees per acre, the basal area and the proportion of conifer in the combined inner zone and adjacent core zone so that the growth of the trees would meet desired future conditions. The following table defines basal area targets when the stand is ~~((one hundred forty))~~ 140 years old.

Site Class	Desired future condition target basal area per acre (at 140 years)
I	325 sq. ft.
II	325 sq. ft.
III	325 sq. ft.
IV	325 sq. ft.
V	325 sq. ft.

Growth modeling is necessary to calculate whether a particular stand meets stand requirement and is on a trajectory towards these desired future condition basal area target. The appropriate growth model

will be based on stand characteristics and will include at a minimum, the following components: The number of trees by diameter class, the percent of conifer and hardwood, and the age of the stand. See board manual section 7.

((+i)) (a) Hardwood conversion in the inner zone. When the existing stands in the combined core and inner zone do not meet stand requirements, no harvest is permitted in the inner zone, except in connection with hardwood conversion.

The landowner may elect to convert hardwood-dominated stands in the **inner zone** to conifer-dominated stands. Harvesting and replanting shall be in accordance with the following limits:

((+A)) (i) Conversion activities in the inner zone of any harvest unit are only allowed where all of the following are present:

((+)) (A) Existing stands in the combined core and inner zone do not meet stand requirements ((WAC 222-30-021 (1)(b))) in this subsection;

((+)) (B) There are fewer than ((fifty-seven)) 57 conifer trees per acre eight inches or larger dbh in the conversion area;

((+)) (C) There are fewer than ((one-hundred)) 100 conifer trees per acre larger than four inches dbh in the conversion area;

((+)) (D) There is evidence (such as conifer stumps, historical photos, or a conifer understory) that the conversion area can be successfully reforested with conifer and support the development of conifer stands;

((+)) (E) The landowner owns ((five-hundred)) 500 feet upstream and ((five-hundred)) 500 feet downstream of the harvest unit;

((+)) (F) The core and inner zones contain no stream adjacent parallel roads;

((+)) (G) Riparian areas contiguous to the proposed harvest unit are owned by the landowner proposing to conduct the conversion activities, and meet shade requirements of WAC 222-30-040 or have a ((seventy-five)) 75-foot buffer with trees at least ((forty)) 40 feet tall on both sides of the stream for ((five-hundred)) 500 feet upstream and ((five-hundred)) 500 feet downstream of the proposed harvest unit (or the length of the stream, if less);

((+)) (H) If the landowner has previously converted hardwood-dominated stands, then postharvest treatments must have been performed to the satisfaction of the department.

((+B)) (ii) In addition to the conditions set forth above, permitted conversion activities in the inner zone of any harvest unit are limited by the following:

((+)) (A) Each continuous conversion area is not more than ((five hundred)) 500 feet in length; two conversion areas will be considered "continuous" unless the no-harvest area separating the two conversion areas is at least half the length of the larger of the two conversion areas.

((+)) (B) Type S and F ((Type 1, 2, or 3)) Waters: Up to ((fifty)) 50 percent of the inner zone area of the harvest unit on one side of the stream may be converted provided that:

((+)) (I) The landowner owns the opposite side of the stream and the landowner's riparian area on the opposite bank meets the shade requirements of WAC 222-30-040 or has a ((seventy-five)) 75-foot buffer of trees at least ((forty)) 40 feet tall or:

((+)) (II) The landowner does not own land on the opposite side of the stream but the riparian area on the opposite bank meets the shade requirements of WAC 222-30-040 or has a ((seventy-five)) 75-foot buffer of trees at least ((forty)) 40 feet tall.

((~~A~~)) (C) Not more than ((~~twenty-five~~)) 25 percent of the inner zone of the harvest unit on both sides of a Type S or F Water may be converted if the landowner owns both sides.

((~~C~~)) (iii) Where conversion is allowed in the **inner zone**, trees within the conversion area may be harvested except that:

((~~A~~)) (A) Conifer trees larger than ((~~twenty~~)) 20 inches dbh shall not be harvested;

((~~A~~)) (B) Not more than ((~~ten~~)) 10 percent of the conifer stems greater than eight inches dbh, exclusive of the conifer noted above, within the conversion area may be harvested; and

((~~A~~)) (C) The landowner must exercise reasonable care in the conduct of harvest activities to minimize damage to all residual conifer trees within the conversion area including conifer trees less than eight inches dbh.

((~~D~~)) (iv) Following harvest in conversion areas, the landowner must:

((~~A~~)) (A) Reforest the conversion area with **conifer** tree species suitable to the site in accordance with the requirements of WAC 222-34-010; ((and

~~A~~)) (B) Conduct postharvest treatment of the site until the conifer trees necessary to meet acceptable stocking levels in WAC 222-34-010(2) have crowns above the brush or until the conversion area contains a minimum of ((~~one hundred fifty~~)) 150 conifer trees greater than eight inches dbh per acre((-)); and

((~~A~~)) (C) Notify the department in writing within three years of the approval of the forest practices application for hardwood conversion, if the hardwood conversion has been completed.

((~~E~~)) (v) Tracking hardwood conversion. The purpose of tracking hardwood conversion is to determine if hardwood conversion is resulting in adequate enhancement of riparian functions toward the desired future condition while minimizing the short term impacts on functions. The department will use existing or updated databases developed in cooperation with the Washington Hardwoods Commission to identify watershed administrative units (WAUs) with a high percentage of hardwood-dominated riparian areas and, thus have the potential for excessive hardwood conversion under these rules. The department will track the rate of conversion of hardwoods in the riparian zone: (1) Through the application process on an annual basis; and (2) at a WAU scale on a biennial basis as per WAC 222-30-120 through the adaptive management process which will develop thresholds of impact for hardwood conversion at the watershed scale.

((~~ii~~)) (b) Harvest options.

((~~A~~)) (i) No inner zone management. When the existing stands in the combined core and inner zone do not meet stand requirements, no harvest is permitted in the inner zone. When no harvest is permitted in the inner zone or the landowner chooses not to enter the inner zone, the width of core, inner and outer zones are as provided in the following table:

No inner zone management RMZ widths for Western Washington

Site Class	RMZ width	Core zone width (measured from outer edge of bankfull width or outer edge of CMZ of water)	Inner zone width (measured from outer edge of core zone)		Outer zone width (measured from outer edge of inner zone)	
			stream width ≤10'	stream width >10'	stream width ≤10'	stream width >10'
I	200'	50'	83'	100'	67'	50'

Site Class	RMZ width	Core zone width (measured from outer edge of bankfull width or outer edge of CMZ of water)	Inner zone width (measured from outer edge of core zone)		Outer zone width (measured from outer edge of inner zone)	
			stream width ≤10'	stream width >10'	stream width ≤10'	stream width >10'
II	170'	50'	63'	78'	57'	42'
III	140'	50'	43'	55'	47'	35'
IV	110'	50'	23'	33'	37'	27'
V	90'	50'	10'	18'	30'	22'

((B)) (ii) Inner zone management. If trees can be harvested and removed from the inner zone because of surplus basal area consistent with the stand requirement, the harvest and removal of the trees must be undertaken consistent with one of two options:

((I)) (A) **Option 1. Thinning from below.** The objective of thinning is to distribute stand requirement trees in such a way as to shorten the time required to meet large wood, fish habitat and water quality needs. This is achieved by increasing the potential for leave trees to grow larger than they otherwise would without thinning. Thinning harvest under option 1 must comply with the following:

((A)) (I) Residual trees left in the combined core and inner zones must meet stand requirements necessary to be on a trajectory to desired future condition. See board manual section 7 for guidelines.

((A)) (II) Thinning must be from below, meaning the smallest dbh trees are selected for harvest first, then progressing to successively larger diameters.

((A)) (III) Thinning cannot decrease the proportion of conifer in the stand.

((A)) (IV) Shade retention to meet the shade rule must be confirmed by the landowner for any harvest inside of ((seventy-five)) 75 feet from the outer edge of bankfull width or outer edge of CMZ, whichever is greater.

((A)) (V) The number of residual conifer trees per acre in the inner zone will equal or exceed ((fifty-seven)) 57.

Option 1. Thinning from below.

Site class	RMZ width	Core zone width (measured from outer edge of bankfull width or outer edge of CMZ of water)	Inner zone width (measured from outer edge of core zone)		Outer zone width (measured from outer edge of inner zone)	
			stream width ≤10'	stream width >10'	stream width ≤10'	stream width >10'
I	200'	50'	83'	100'	67'	50'
II	170'	50'	63'	78'	57'	42'
III	140'	50'	43'	55'	47'	35'
IV	110'	50'	23'	33'	37'	27'
V	90'	50'	10'	18'	30'	22'

((II)) (B) **Option 2. Leaving trees closest to the water.** Management option 2 applies only to riparian management zones for site class I, II, and III on streams that are less than or equal to ((ten)) 10 feet wide and RMZs in site class I and II for streams greater than ((ten)) 10 feet wide. Harvest must comply with the following:

((A)) (I) Harvest is not permitted within ((thirty)) 30 feet of the core zone for streams less than or equal to ((ten)) 10 feet wide

and harvest is not permitted within ~~((fifty))~~ 50 feet of the core zone for streams greater than ~~((ten))~~ 10 feet wide;

~~((A))~~ (II) Residual leave trees in the combined core and inner zone must meet stand requirements necessary to be on a trajectory to desired future condition. See board manual section 7 for calculating stand requirements;

~~((A))~~ (III) A minimum of ~~((twenty))~~ 20 conifers per acre, with a minimum ~~((twelve))~~ 12 inch dbh, will be retained in any portion of the inner zone where even-age harvest occurs. These riparian leave trees will be counted towards meeting applicable stand requirements. The number of riparian leave trees cannot be reduced below ~~((twenty))~~ 20 for any reason.

~~((A))~~ (IV) Trees are selected for harvest starting from the outer most portion of the inner zone first then progressively closer to the stream.

~~((A))~~ (V) If ~~((b)(ii)(B)(II))~~ (b)(ii)(B) of this subsection results in surplus basal area per the stand requirement, the landowner may take credit for the surplus by harvesting additional riparian leave trees required to be left in the adjacent outer zone on a basal area-for-basal area basis. The number of leave trees in the outer zone can be reduced only to a minimum of ~~((ten))~~ 10 trees per acre.

Option 2. Leaving trees closest to water.

Site Class	RMZ width	Core zone width (measured from outer edge of bankfull width or outer edge of CMZ of water)	Inner zone width				Outer zone width (measured from outer edge of inner zone)	
			stream width ≤10'	stream width ≤10'	stream width >10'	stream width >10'	stream width ≤10'	stream width ≥10'
				minimum floor distance		minimum floor distance		
			(measured from outer edge of core zone)	(measured from outer edge of core zone)	(measured from outer edge of core zone)	(measured from outer edge of core zone)		
I	200'	50'	84'	30'	84'	50'	66'	66'
II	170'	50'	64'	30'	70'	50'	56'	50'
III	140'	50'	44'	30'	**	**	46'	**

** Option 2 for site class III on streams >10' is not permitted because of the minimum floor (100') constraint.

~~((A))~~ (c) **Where the basal area components of the stand requirement cannot be met** within the sum of the areas in the inner and core zone due to the presence of a stream-adjacent parallel road in the inner or core zone, a determination must be made of the approximate basal area that would have been present in the inner and core zones if the road was not occupying space in the core or inner zone and the shortfall in the basal area component of the stand requirement. See definition of "stream-adjacent parallel road" in WAC 222-16-010.

~~((A))~~ (i) Trees containing basal area equal to the amount determined in ~~((b)(iii))~~ (c) of this subsection will be left elsewhere in the inner or outer zone, or if the zones contain insufficient riparian leave trees, substitute riparian leave trees will be left within the RMZ width of other Type S or F Waters in the same unit or along Type Np or Ns Waters in the same unit in addition to all other RMZ requirements on those same Type S, F, Np or Ns Waters.

((B)) (ii) When the stream-adjacent road basal area calculated in ((b)(iii)) (c) of this subsection results in an excess in basal area (above stand requirement) then the landowner may receive credit for such excess which can be applied on a basal area-by-basal area basis against the landowner's obligation to leave trees in the outer zone of the RMZ of such stream or other waters within the same unit, provided that the number of trees per acre in the outer zone is not reduced to less than ((ten)) 10 trees per acre.

((C)) (iii) When the basal area requirement cannot be met, as explained in ((b)(iii)) (c) of this subsection, the shortfall may be reduced through the implementation of an acceptable large woody debris placement plan. See board manual section 26 for guidelines.

((iv)) (d) If a harvest operation includes both yarding and harvest activities within the RMZ, all calculations of basal area for stand requirements will be determined as if the yarding corridors were constructed prior to any other harvest activities. If trees cut or damaged by yarding are taken from excess basal area, these trees may be removed from the inner zone. Trees cut or damaged by yarding in a unit which does not meet the basal area target of the stand requirements cannot be removed from the inner zone. Any trees cut or damaged by yarding in the core zone may not be removed.

((e)) (3) **Outer zones.** Timber harvest in the outer zone must leave ((twenty)) 20 riparian leave trees per acre after harvest. "**Outer zone riparian leave trees**" are trees that must be left after harvest in the outer zone in Western Washington. Riparian leave trees must be left uncut throughout all future harvests:

Outer zone riparian leave tree requirements

Application	Leave tree spacing	Tree species	Minimum dbh required
Outer zone	Dispersed	Conifer	12" dbh or greater
Outer zone	Clumped	Conifer	12" dbh or greater
Protection of sensitive features	Clumped	Trees representative of the overstory including both hardwood and conifer	8" dbh or greater

The ((twenty)) 20 riparian leave trees to be left can be reduced in number under the circumstances delineated in ((e)(iv)) (d) of this subsection. The riparian leave trees must be left on the landscape according to one of the following two strategies. A third strategy is available to landowners who agree to a LWD placement plan.

((i)) (a) **Dispersal strategy.** Riparian leave trees, which means conifer species with a diameter measured at breast height (dbh) of ((twelve)) 12 inches or greater, must be left dispersed approximately evenly throughout the outer zone. If riparian leave trees of ((twelve)) 12 inches dbh or greater are not available, then the next largest conifers must be left. If conifers are not present, riparian leave trees must be left according to the clumping strategy in ((e)(ii)) (b) of this subsection.

((ii)) (b) **Clumping strategy.** Riparian leave trees must be left clumped in the following way:

((A)) (i) Clump trees in or around one or more of the following **sensitive features** to the extent available within the outer zone. When clumping around sensitive features, riparian leave trees must be eight

inches dbh or greater and representative of the overstory canopy trees in or around the sensitive feature and may include both hardwood and conifer species. Sensitive features are:

((+I+)) (A) Seeps and springs;

((+II+)) (B) Forested wetlands;

((+III+)) (C) Topographic locations (and orientation) from which leave trees currently on the site will be delivered to the water;

((+IV+)) (D) Areas where riparian leave trees may provide wind-throw protection;

((+V+)) (E) Small unstable, or potentially unstable, slopes not of sufficient area to be detected by other site evaluations. See WAC 222-16-050 (1)(d)((-));

((+VI+)) (F) Archaeological sites or historic archaeological resources as defined in RCW 27.53.030;

((+VII+)) (G) Historic sites eligible for listing on the National Register of Historic Places or the Washington Heritage Register as determined by the Washington state department of archaeology and historic preservation. See WAC 222-16-050 (1)(f); or

((+VIII+)) (H) Sites containing evidence of Native American cairns, graves or glyptic records as provided for in chapters 27.44 and 27.53 RCW. See WAC 222-16-050 (1)(f).

((+B+)) (ii) If sensitive features are not present, then clumps must be well distributed throughout the outer zone and the leave trees must be of conifer species with a dbh of ~~((+twelve+))~~ 12 inches or greater. When placing clumps, the applicant will consider operational and biological concerns. Tree counts must be satisfied regardless of the presence of stream-adjacent parallel roads in the outer zone.

((+iii+)) (c) **Large woody debris in-channel placement strategy.**

((+A+)) (i) In order to reduce the number of required outer zone trees, a landowner may design a LWD placement plan for department approval consistent with guidelines in board manual sections 5 and 26. Landowners are encouraged to consult with the department and the department of fish and wildlife while designing the plan and prior to submitting a forest practices application.

((+B+)) (ii) Reduction of trees in the outer zone must not go below a minimum of ~~((+ten+))~~ 10 trees per acre.

((+C+)) (iii) If this strategy is chosen, a complete forest practices application must include the LWD placement plan.

((+iv+)) (d) **Twenty riparian leave trees must be left after harvest** with the exception of the following:

((+A+)) (i) If a landowner agrees to implement a placement strategy, see ~~((+iii+))~~ (c) of this subsection.

((+B+)) (ii) If trees are left in an associated channel migration zone, the landowner may reduce the number of trees required to be left according to the following:

((+I+)) (A) Offsets will be measured on a basal area-for-basal area basis.

((+II+)) (B) Conifer in a CMZ equal to or greater than six inches dbh will offset conifer in the outer zone at a one-to-one ratio.

((+III+)) (C) Hardwood in a CMZ equal to or greater than ~~((+ten+))~~ 10 inches dbh will offset hardwood in the outer zone at a one-to-one ratio.

((+IV+)) (D) Hardwood in a CMZ equal to or greater than ~~((+ten+))~~ 10 inches dbh will offset conifer in the outer zone at a three-to-one ratio.

~~((+2+)) **Western Washington protection for Type Np and Ns Waters.**~~

~~(a) An **equipment limitation zone** is a thirty-foot wide zone measured horizontally from the outer edge of the bankfull width of a Type Np or Ns Water where equipment use and other forest practices that are specifically limited by these rules. It applies to all perennial and seasonal streams.~~

~~(i) On-site mitigation is required if any of the following activities exposes the soil on more than ten percent of the surface area of the zone:~~

~~(A) Ground based equipment;~~

~~(B) Skid trails;~~

~~(C) Stream crossings (other than existing roads); or~~

~~(D) Cabled logs that are partially suspended.~~

~~(ii) Mitigation must be designed to replace the equivalent of lost functions especially prevention of sediment delivery. Examples include water bars, grass seeding, mulching, etc.~~

~~(iii) Nothing in this subsection (2) reduces or eliminates the department's authority to prevent actual or potential material damage to public resources under WAC 222-46-030 or 222-46-040 or any related authority to condition forest practices notifications or applications.~~

~~(b) **Sensitive site and RMZs protection along Type Np Waters.** Forest practices must be conducted to protect Type Np RMZs and sensitive sites as detailed below:~~

~~(i) A fifty-foot, no-harvest buffer, measured horizontally from the outer edge of bankfull width, will be established along each side of the Type Np Water as follows:~~

~~Required no-harvest, 50-foot buffers on
Type Np Waters.~~

Length of Type Np Water from the confluence of Type S or F Water	Length of 50' buffer required on Type Np Water (starting at the confluence of the Type Np and connecting water)
Greater than 1000'	500'
Greater than 300' but less than 1000'	Distance of the greater of 300' or 50% of the entire length of the Type Np Water
Less than or equal to 300'	The entire length of Type Np Water

~~(ii) No timber harvest is permitted in an area within fifty feet of the outer perimeter of a soil zone perennially saturated from a headwall seep.~~

~~(iii) No timber harvest is permitted in an area within fifty feet of the outer perimeter of a soil zone perennially saturated from a side-slope seep.~~

~~(iv) No timber harvest is permitted within a fifty-six foot radius buffer patch centered on the point of intersection of two or more Type Np Waters.~~

~~(v) No timber harvest is permitted within a fifty-six foot radius buffer patch centered on a headwater spring or, in the absence of a headwater spring, on a point at the upper most extent of a Type Np Water as defined in WAC 222-16-030(3) and 222-16-031.~~

~~(vi) No timber harvest is permitted within an alluvial fan.~~

~~(vii) At least fifty percent of a Type Np Waters' length must be protected by buffers on both sides of the stream (2-sided buffers).~~

Buffered segments must be a minimum of one hundred feet in length. If an operating area is located more than five hundred feet upstream from the confluence of a Type S or F Water and the Type Np Water is more than one thousand feet in length, then buffer the Type Np Water according to the following table. If the percentage is not met by protecting sensitive sites listed in (b) (i) through (vii) of this subsection, then additional buffers are required on the Type Np Water to meet the requirements listed in the table.

Minimum percent of length of Type Np Waters to be buffered when more than 500 feet upstream from the confluence of a Type S or F Water

Total Length of a Type Np Water upstream from the confluence of a Type S or F Water	Percent of length of Type Np Water that must be protected with a 50 foot no harvest buffer more than 500 feet upstream from the confluence of a Type S or F Water
1000 feet or less	Refer to table in this subsection (i) above
1001-1300 feet	19%
1301-1600 feet	27%
1601-2000 feet	33%
2001-2500 feet	38%
2501-3500 feet	42%
3501-5000 feet	44%
Greater than 5000 feet	45%

The landowner must select the necessary priority areas for additional two-sided buffers according to the following priorities:

- (A) Low gradient areas;
- (B) Perennial water reaches of nonsedimentary rock with gradients greater than twenty percent in the tailed frog habitat range;
- (C) Hyporheic and groundwater influence zones; and
- (D) Areas downstream from other buffered areas.

Except for the construction and maintenance of road crossings and the creation and use of yarding corridors, no timber harvest will be allowed in the designated priority areas. Landowners must leave additional acres equal to the number of acres (including partial acres) occupied by an existing stream-adjacent parallel road within a designated priority area buffer.

(c) None of the limitations on harvest in or around Type Np Water RMZs or sensitive sites listed in (b) of this subsection will preclude or limit:

(i) The construction and maintenance of roads for the purpose of crossing streams in WAC 222-24-030 and 222-24-050.

(ii) The creation and use of yarding corridors in WAC 222-30-060(1).

To the extent reasonably practical, the operation will both avoid creating yarding corridors or road crossings through Type Np Water RMZ or sensitive sites and associated buffers, and avoid management activities which would result in soil compaction, the loss of protective vegetation or sedimentation in perennially moist areas.

Where yarding corridors or road crossings through Type Np Water RMZs or sensitive sites and their buffers cannot reasonably be avoided,

~~ded, the buffer area must be expanded to protect the sensitive site by an area equivalent to the disturbed area or by providing comparable functions through other management initiated efforts.~~

~~Landowners must leave additional acres equal to the number of acres (including partial acres) occupied by an existing stream adjacent parallel road within a Type Np Water RMZs or sensitive site buffer.))~~

NEW SECTION

WAC 222-30-0211 Western Washington Type Np Water riparian management zones and Type Ns Water riparian protections. These rules apply to all Type Np and Ns Waters on forest land in Western Washington, except as provided in WAC 222-30-023. Riparian management zones (RMZ) are measured horizontally from the outer edge of the bankfull width or channel migration zone, whichever is greater, and extend to the limits as described in this section. See board manual section 7 for guidelines.

(1) An **equipment limitation zone** is a 30-foot wide zone measured horizontally from the outer edge of the bankfull width of a Type Np or Ns Water where equipment use and other forest practices that are specifically limited by these rules. It applies to all nonfish perennial and seasonal streams.

(a) On-site mitigation is required if any of the following activities exposes the soil on more than 10 percent of the surface area of the zone:

- (i) Ground based equipment;
- (ii) Skid trails;
- (iii) Stream crossings (other than existing roads); or
- (iv) Cabled logs that are partially suspended.

(b) Mitigation must be designed to replace the equivalent of lost functions, especially prevention of sediment delivery. Examples include water bars, grass seeding, mulching, etc.

(c) Nothing in this section reduces or eliminates the department's authority to prevent actual or potential material damage to public resources under WAC 222-46-030 or 222-46-040 or any related authority to condition forest practices notifications or applications.

(2) **Sensitive site protections along Type Np Waters.** Forest practices must be conducted to protect Type Np Water sensitive sites. The sensitive sites must be identified and protected before establishing the Type Np RMZ as required in subsection (3) of this section. Sensitive sites and their protections are detailed below:

(a) No timber harvest is permitted in an area within 50 feet of the outer perimeter of a soil zone perennially saturated from a head-wall seep.

(b) No timber harvest is permitted in an area within 50 feet of the outer perimeter of a soil zone perennially saturated from a side-slope seep.

(c) No timber harvest is permitted within a 56-foot radius buffer patch centered on the point of intersection of two or more Type Np Waters.

(d) No timber harvest is permitted within a 56-foot radius buffer patch centered on a headwater spring or, in the absence of a headwater

spring, on a point at the upper most extent of a Type Np Water as defined in WAC 222-16-030(3).

(e) No timber harvest is permitted within an alluvial fan.

(3) **Riparian management zones (RMZ) protection along Type Np Waters.** Forest practices must be conducted to protect Type Np RMZs as detailed below. Where sensitive site protections, as outlined in subsection (2) of this section, exceed the no-harvest RMZ requirements in this subsection (3), the wider no-harvest buffer requirement shall apply.

(a) When the topographic basin in which harvest will occur is larger than 30 acres and 85 percent or more of the basin is planned, or reasonably expected, to be harvested within a five-year period, the landowner must designate a two-sided 75-foot no-harvest buffer along the entire stream reach of each Type Np Water.

(b) For all other topographic basins and harvests, a 75-foot no-harvest buffer will be established along both sides of the Type Np Water for the first 600 feet upstream from the confluence of Type S or F Water or, for Type Np streams without an above-ground confluence to a Type S or F Water, the lowest 600-foot length of the isolated stream. Upstream of the first 600 feet of a Type Np Water, the RMZ will be established based on stream bankfull width, as follows:

(i) For each Type Np stream three feet bankfull width or greater, the landowner must identify either a partial management strategy or no cut strategy:

(A) For partial management strategy, the landowner must designate a two-sided 75-foot RMZ along the entire stream reach in the harvest unit, and establish:

(I) A no-harvest buffer measuring 50 feet wide, or contained within the sensitive site protection area as described in subsection (2)(a) through (d) of this section; and

(II) A managed zone, either 25 feet wide measured from outer edge of the no-harvest buffer, or the remaining width from the outer edge of the sensitive site to the outer edge of the 75-foot RMZ where:

- Up to 50 percent of the trees may be harvested with an evenly-spaced distribution of leave trees; and

- Leave trees shall be representative of diameters found within the managed zone, and shall be representative of the tree species distribution within the managed zone.

(B) For no cut strategy, the landowner must designate a two-sided 65-foot no-harvest buffer along the entire stream reach in the harvest unit.

(ii) For each Type Np stream less than three feet bankfull width, the landowner must identify and protect the sensitive sites as detailed in subsection (2) of this section, then designate a two-sided no-harvest 50-foot buffer along the entire stream reach in the harvest unit. Where the outer edge of sensitive sites protections are less than 50-feet from bankfull width or the alluvial fan, the 50-foot buffer shall apply.

(4) Except for the construction and maintenance of road crossings and the creation and use of yarding corridors, no timber harvest will be allowed in the designated no-harvest buffers. Landowners must leave additional acres equal to the number of acres (including partial acres) occupied by an existing stream-adjacent parallel road within a designated additional buffer.

(5) None of the limitations on harvest in or around Type Np Water RMZs or sensitive sites listed in this section will preclude or limit:

(a) The construction and maintenance of roads for the purpose of crossing streams in WAC 222-24-030 and 222-24-050.

(b) The creation and use of yarding corridors in WAC 222-30-060(1): To the extent reasonably practical, the operation will both avoid creating yarding corridors or road crossings through Type Np Water RMZs or sensitive sites and associated buffers, and avoid management activities which would result in soil compaction, the loss of protective vegetation, or sedimentation in perennially moist areas. Where yarding corridors or road crossings through Type Np Water RMZs or sensitive sites and their buffers cannot reasonably be avoided, the buffer area must be expanded to protect the sensitive site by an area equivalent to the disturbed area or by providing comparable functions through other management-initiated efforts. Landowners must leave additional acres equal to the number of acres (including partial acres) occupied by an existing stream-adjacent parallel road within a Type Np Water RMZs or sensitive site buffer.

1/29 SHARED WITH COLLEAGUES

Key Np Buffer Rulemaking Comment Points. ASK: Adaptive Management should start over.

1. Let science guide smart environmental policy and avoid unnecessary harm

Key Point: FPB should start over – find an alternative that restores science and rejects politics.

- The Majority Proposal puts politics ahead of science. Adaptive Management should start over.
- Private forests already meet a global gold standard for environmental management.
- The new rule sacrifices real environmental and economic gains for no guaranteed benefit.

2. The proposed rule harms jobs, housing, climate, and wildfire resilience

Key Point: This rule undermines climate progress and rural livelihoods.

- Would remove 4–8% of the 2023 private harvest—equal to 1–2 sawmills, 2,000 jobs, and wood for up to 15,000 homes/year.
- No fish are present in these streams and no documented water quality harm.
- WA's working forests store carbon, reduce wildfire risk, and support wildlife habitat.

3. The economic impact will hit rural communities hardest

Key Point: Billions of dollars in economic damage with no real benefit to fish.

- Rule would sideline over 200,000 acres of private forestland.
- Thousands of rural jobs are at risk; schools and services will suffer.
- Less local wood production threatens long-term viability of the forest products sector.

4. Forests & Fish has worked—don't break it

Key Point: Landowners held up their end of the deal. Olympia is breaking its promise.

- \$2.36 billion cost absorbed by landowners under Forests & Fish Law (FFL).
- 764,000 acres are already set aside with commitment that future changes require Adaptive Management.
- Proposed rule demands another 200,000 acres—without compensation or scientific justification.

5. The rulemaking process was flawed and legally questionable

Key Point: The rule lacks support, transparency, and fairness.

- Only 5 of 13 FPB members voted for the rule—far from a majority.
- The Minority Proposal was never fully considered.
- Ecology violated Clean Water Act and Administrative Procedure Act process requirements.

6. Follow science, not politics

Key Point: Current practices are working—don't disrupt a proven system.

- WA's private forestlands are sustaining salmon habitat and clean water.
- There's no evidence this rule improves fish recovery.
- FPB should restore trust and integrity by including the Minority Proposal in the rulemaking process.

Address for written comments:	FPB Public Hearings:
CR 102 Proposed Rule Making: due 5 pm Aug. 12, 2025 • Online: To Submit Comments: forest.practicesboard@dnr.wa.gov • By US Mail (postmarked Aug 12, 2025) Attn: Patricia Anderson P.O. Box 47012, Olympia, WA 98504-7012	• 7/23/25, 4 p.m.-6 p.m. McClelland Center 951 Delaware Street, Longview • 7/29/25, 4 p.m.-6 p.m. Sedro Woolley Community Center 703 Pacific Street, Sedro-Wooley • 8/4/25, 4 p.m.-6 p.m. Vern Burton Gym, Parks & Rec 308 East 4th St., Port Angeles • 8/12/25, 4 p.m.-6 p.m. Office Building 2 auditorium 1115 Washington St. SE, Olympia

Tier II Process – ASK: The Forest Practices Board should reject Ecology's Tier II Analysis.

1. Misuse of the Tier II Review Process

- Ecology keeps changing its rules. It first claimed any stream warming over 0.3°C violated water quality law, then allowed warming under its preferred Np buffer rule proposal.
- Under long-standing law, forest practice rules already meet Tier II through the Adaptive Management Program (AMP), which was designed to evolve rules based on science.
- Now Ecology is claiming Adaptive Management Program (AMP) recommendations are a "new or expanded action" that requires a full-blown Tier II review, contradicting past practice and law.

2. Failure to Follow the Law

- Ecology inflated its role in the Forest Practices Board process. The Board—not Ecology—decides what rules to propose for review.
- Viable, science-based alternatives were dismissed before they were even analyzed or opened to public comment.
- Ecology ignored laws requiring the least burdensome alternative and misused its antidegradation authority.

3. Science Ignored, Studies Misused

- The AMP's own studies showed that existing Np buffers result in stream temperature similar to reference sites in most cases.
- Ecology cherry-picked worst-case temperature readings, while ignoring evidence that stream temperatures stayed below the legal limit 90% of the time.
- Ecology overlooked uncertainties and clear warnings from researchers to be cautious when applying these results to broader Western Washington forestlands.

4. Massive Economic Harm, No Proven Benefit

- The rule could cost rural Washington up to \$8 billion over a forest rotation—harming jobs, tax revenue, and working forests.
- Ecology ignored smarter, less costly options that would still protect water quality.
- Their economic analysis failed to account for the impact on small landowners and used inflated assumptions to justify a preferred outcome.

5. A Rigged Process, Not a Fair One

- The Forest Practices Board was steered toward a single outcome.
- Science-based alternatives from the AMP were blocked.
- The entire process is driven by politics, not science or law.

Bottom Line:

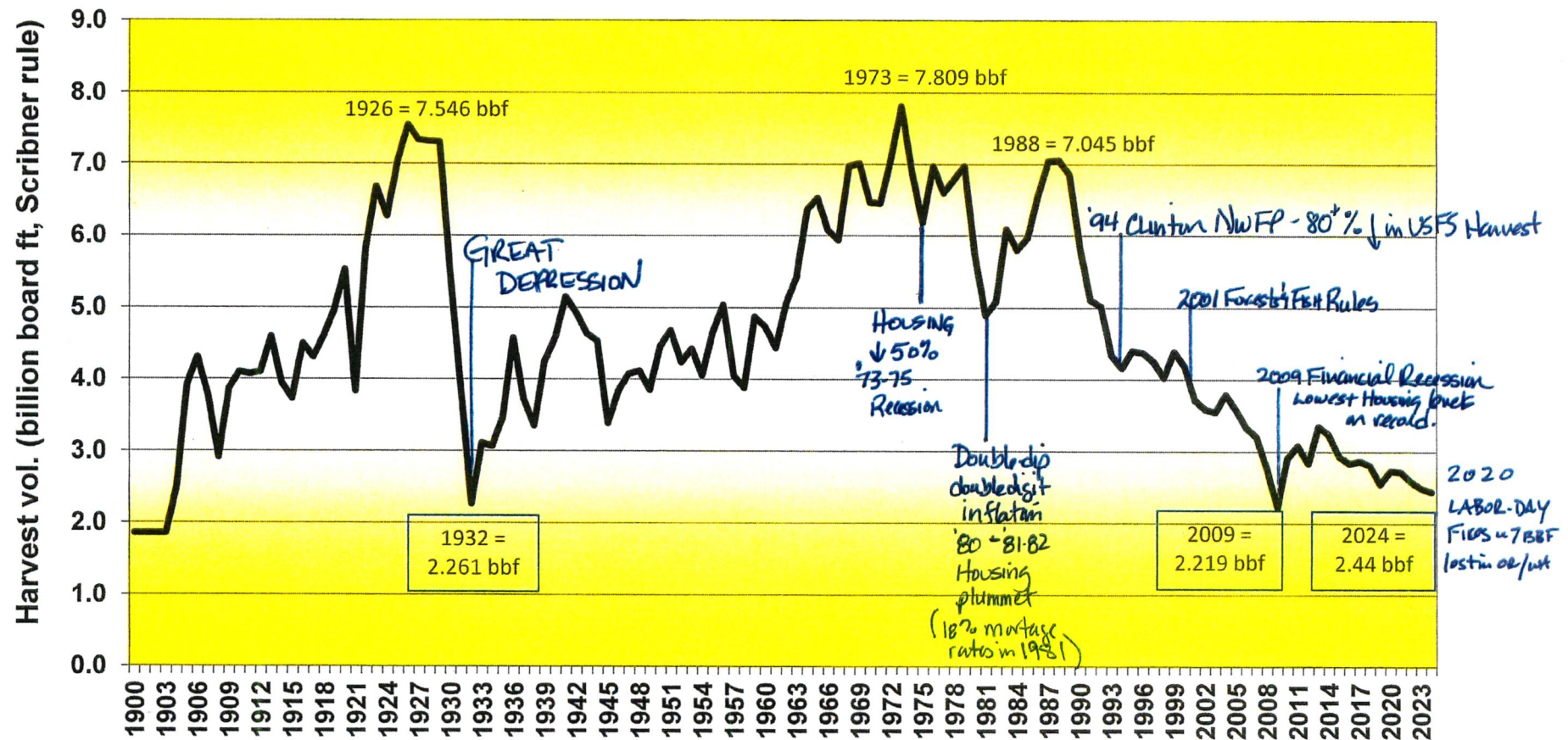
- Ecology's shifting standards, flawed analysis, and dismissive treatment of science and economic harm have undermined trust and legality.
- **The Forest Practices Board should reject Ecology's Tier II analysis, the proposed Np buffer rule, and restart the process—this time grounded in law, science, and fairness.**

Ecology Online Hearing virtual: 7/31/2025 5:30 pm – online only = [Register for the webinar](#)

Forestry Pollution – Draft Tier II Analysis of FPB Draft Rule (Ecy): due 11:59 pm August 18, 2025

- Online: You can [submit comments online](#)
- By US Mail (must be postmarked by August 18, 2025):
Watershed Management Section, Department of Ecology
PO Box 47696
Olympia, WA 98504-7696

Wash. State Total Timber Harvest, 1900-2024(est)



Note: Harvest volumes for 1900 through 1903 are estimates, and equal harvest volumes reported for 1899.

Source: Dept. of Natural Resources Timber Harvest Statistics (collected from Dept. of Revenue)



WASHINGTON FOREST PROTECTION ASSOCIATION
724 Columbia St NW, Suite 250
Olympia, WA 98501
360-352-1500 Fax: 360-352-4621

July 16, 2025

By E-mail

Forest Practices Board
c/o Patricia Anderson, Rules Coordinator
Department of Natural Resources
1111 Washington Street SE, Olympia WA 98504-7012
email: forest.practicesboard@dnr.wa.gov

Re: Comment on SEPA Determination of Non-Significance for Proposed Type NP Stream Buffer Rule;
SEPA # 202502780

Dear Forest Practices Board:

I am writing on behalf of the Washington Forest Protection Association (WFPA) to provide comments in response to the Forest Practices Board Determination of Nonsignificance (DNS) under the State Environmental Policy Act (SEPA) for the Proposed Type Np Stream Buffer Rule ("Proposed Np Buffer Rule").

WFPA is a trade association founded in 1908 representing private forest landowners in Washington State. WFPA is committed to advancing sustainable forestry in Washington State to provide forest products and environmental benefits for the public. WFPA establishes balanced forest policies that encourages investment in forestland, protection of fish, water and wildlife, and promote responsible forest management as a preferred land use. WFPA's members are large and small companies, individuals and families who grow, harvest and re-grow trees on about four million acres within Washington.

WFPA members reside and do business in areas that will be directly affected by the substantial changes to forestry regulation in the state in the Proposed Np Buffer Rule. We have firsthand knowledge of the negative economic, environmental, and social consequences that will or are probable to occur under the Proposed Np Buffer Rule. A Determination of Significance (DS) SEPA threshold determination should have been issued for the Proposed Np Buffer Rule. The failure to do so and the Board's issuance of its cursory DNS shortchanges the public and substantially interferes with implementing the goals and policies of SEPA and the Forest Practices Act. By electing to issue the DNS and forgoing preparation of an Environmental Impact Statement (EIS), the Board has failed to meet its obligations under SEPA. If the Proposed Np Buffer Rule is not itself withdrawn, further consideration should only occur after preparation of an EIS, including an analysis of potential alternatives.

I. The Board's DNS Does Not Comply with SEPA and Must Be Withdrawn

The Proposed Np Buffer Rule will preclude the existing and longstanding timber harvest use in up to 235,000 acres of forestland in Western Washington, representing up to 7% of the total private forestland harvest in Washington, significantly altering the future environment of those lands. The Proposed Np Buffer Rule will result in foregone timber value of up to \$1,000,000,000 (\$1 billion) or more, regional economic wage, revenue, and state and local harvest tax losses of up to \$315 million per year (~\$5 billion to \$8 billion over 45 years), and loss of nearly 2,000 direct logging and manufacturing jobs primarily impacting distressed rural communities. The Proposed Np Buffer Rule will have sweeping direct, indirect, and cumulative adverse environmental, social, and economic impacts. But the citizens of Washington State and the decision-makers at the Board would not know any of this from reading the terse SEPA Checklist and DNS for the Proposed Np Buffer Rule. The Board's DNS falls well short of even the minimum, threshold procedural requirements of SEPA and must therefore be withdrawn.

We're managing private forests so they work for all of us. ®

A. The Board's Terse Threshold SEPA Determination is Contrary to SEPA's Purpose and Policies

SEPA seeks to "[a]ssure for all people of Washington safe, healthful, productive, and aesthetically and culturally pleasing surroundings," "[a]ttain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences," and "[a]chieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities."¹ SEPA requires all governmental agencies to consider environmental impacts of a proposal before making decisions.²

SEPA's purpose is to enlighten decision-making officials and the public to enable review and comment on proposed government actions and thereby improve decision-making.³ SEPA documents should be "concise, clear, and ... supported by evidence that the necessary environmental analyses have been made," and requires careful consideration of "the range of probable impacts, including short-term, long-term effects" and "direct, indirect and cumulative impacts."⁴ An EIS must be prepared for all proposals significantly affecting the quality of the environment.⁵ The determination of whether adoption of the Proposed Np Buffer Rule is likely to result in significant adverse impacts is termed a SEPA "threshold determination."⁶

The primary means of making a threshold determination is to analyze information provided in response to a series of questions set out in a form known as the "SEPA Checklist."⁷ The environmental elements for consideration under SEPA are expansive and include water and air emissions, climate, energy and natural resources, land and shoreline use, housing, transportation, and critical public services, amongst many others.⁸ For a "non-project" proposal such as the Proposed Np Buffer Rule, the Board must complete the SEPA Checklist (Parts A, B, and C) and a supplemental checklist specific to non-project actions (Part D).⁹ For non-project proposals such as the Proposed Np Buffer Rule the "lead agency may exclude any question for the environmental elements (Part B) which they determine do not contribute meaningfully to the analysis of the proposal."¹⁰ But the SEPA Rules thus do not authorize the lead agency to exclude the entirety of Part B, as the Board has done here, only specific questions within Part B that do not meaningfully contribute to the analysis of the proposal. In other words, the supplemental checklist in Part D must be completed in addition to, not in lieu of, the main portion of the Checklist.

It is evident from reviewing the SEPA Checklist for the Proposed Np Buffer Rule that the Board provided virtually no information requested by the SEPA Checklist and does nothing to fulfill SEPA's fundamental purpose and policies. In response to the main portion of the Checklist (Part B), the Board concluded this *entire* Part was not applicable because it would "not contribute meaningfully to the analysis of this non-project action." This sweeping assertion is simply not accurate, as demonstrated below. Instead of answering the questions in Part B that would contribute meaningfully to the analysis, the Board instead deferred its analysis entirely to Part D for non-project actions. But its superficial responses in Part D of the effects of the Proposed Np Buffer Rule disclosed only purported benefits of the non-project action and ignored all possible adverse impacts, including probable indirect and cumulative impacts. The scope and scale of the Proposed Np Buffer Rule is not discussed in any detail, which is critical for assessing impacts. Demonstrably misleading information is provided in the checklist regarding the effects to plants, animals, fish, marine life, energy, and natural resources. The lack of thoroughness in the Board's SEPA Checklist strongly indicates the Board is not giving any serious and impartial consideration to its proposed action. This is not compliant with SEPA.

¹ RCW 43.21C.020(2).

² See RCW 43.21C et seq.

³ WAC 197-11-400(4).

⁴ WAC 197-11-030(2)(c); WAC 197-11-060(4)(c) and (e).

⁵ WAC 197-11-330.

⁶ WAC 197-11-310; WAC 197-11-330.

⁷ WAC 197-11-315; WAC 197-11-960.

⁸ WAC 197-11-444; WAC 197-11-960 (Section B, Environmental Elements).

⁹ WAC 197-11-960.

¹⁰ *Id.*; see also WAC 197-11-315(1)(e).

B. The Board's SEPA Checklist and DNS Do Not Satisfy Prima Facie Compliance with SEPA's Procedural Requirements

For over fifty years, since the Washington Court of Appeals Division I decided *Juanita Bay Valley Cmty. Ass'n v. Kirkland*, SEPA has required a lead agency to actually consider the environmental impacts of a proposal, and to demonstrate that it has done so by proving prima facie compliance with SEPA's procedural requirements:

Moreover, we hold that RCW 43.21C.030(c) necessarily requires the *consideration* of environmental factors by the appropriate governing body in the course of all state and local government actions before it may be determined whether or not an Environmental Impact Statement must be prepared. Thus, SEPA requires that a decision *not* to prepare an Environmental Impact Statement must be based upon a determination that the proposed project is *not* a major action significantly affecting the quality of the environment. A decision by a branch of state government on whether or not to prepare an Environmental Impact Statement is subject to judicial review, but before a court may uphold such a decision, the appropriate governing body must be able to demonstrate that environmental factors were considered in a manner sufficient to amount to **prima facie compliance** with the procedural requirements of SEPA.¹¹

The prima facie test places the burden on the SEPA lead agency—in this case the Board—to demonstrate that it has achieved prima facie compliance with SEPA's procedural requirements before its threshold determination can be entitled to substantial weight.

Three years after *Juanita Bay*, the Washington Supreme Court adopted the prima facie test in its first SEPA decision:

In the absence of a record sufficient 'to demonstrate that environmental factors were considered in a manner sufficient to amount to **prima facie compliance** with the procedural requirements of SEPA,' a 'negative threshold determination' *could* not be sustained upon review even under the 'arbitrary or capricious' standard because the determination would lack sufficient support in the record.¹²

In 2002, the Supreme Court emphatically re-affirmed the test in its *Wild Fish Conservancy v. Dep't of Fish & Wildlife* decision:

When reviewing a SEPA action, 'the court is required to consider the public policy and environmental values of SEPA as well.' A review of the record must show that 'environmental factors were considered in a manner sufficient to amount to **prima facie compliance** with the procedural requirements of SEPA.'

. . . SEPA demands a 'thoughtful decision-making process' where government agencies 'conscientiously and systematically consider environmental values and consequences.'

We assess the validity of an agency's threshold determination by determining whether the environmental factors were 'evaluated to such an extent as to constitute **prima facie compliance** with SEPA procedural requirements.'¹³

And in 2024, in the Supreme Court's most recent SEPA decision, *King County v. Friends of Sammamish Valley*, the Court upheld the reversal by the Growth Management Hearings Board ("GMHB") of a threshold determination made by King County as lead agency.¹⁴ The GMHB concluded that the County did not achieve prima facie compliance with SEPA's procedural requirements, in part because the County, like the Board in this case, did not complete Part B of the Checklist. Both the GMHB and the Supreme Court concluded that by doing so the County "failed to consider

¹¹ 9 Wn. App. 59, 73, 510 P.2d 1140, 1149 (1973) (italics in original; bold added).

¹² *Norway Hill Pres. & Prot. Ass'n v. King Cty. Council*, 87 Wn.2d 267, 276, 552 P.2d 674, 679 (1976) (internal citations omitted) (emphasis added).

¹³ 198 Wn.2d 846, 866, 873, 502 P.3d 359, 370, 373 (2022) (citations omitted) (emphasis added).

¹⁴ 3 Wn.3d 793, 556 P.3d 132 (2024).

potential environmental impacts in its SEPA checklist.”¹⁵ The Supreme Court emphasized the need to meaningfully engage in the SEPA process for non-project actions, such as the Board’s Proposed Np Buffer Rule:

The Board concluded that it was left with the definite and firm conviction that a mistake had been committed when the County issued the DNS. We agree. Overall, the number of changes created by the Ordinance, and the complete lack of engagement with the environmental portion of the SEPA checklist by the County supports the Board’s conclusion. The County must *meaningfully* engage in the SEPA process when making a threshold determination and must complete a full environmental review where significant environmental impacts are likely to occur on land designated as agricultural.¹⁶

In the course of its analysis the Court also concluded that the County was wrong to assert that environmental review was not required because the ordinance enacted stricter requirements:

The County disregards the language in WAC 197-11-330(5), which requires that a threshold determination may not balance the beneficial aspects of a proposal with its adverse impacts. Even where proposals are designed to in some ways improve the environment, significant adverse environmental impacts could result and must still be reviewed for what adverse impacts are likely to occur overall.¹⁷

And the Court noted that the status of the land at issue – designated resource land – was another reason for the reversal:

Any action (even creating a temporary, grass soccer recreation field) that removes potential future productivity of agricultural land may have a probably significant environmental impact.¹⁸

The defects with King County’s threshold determination are present in the Board’s DNS. The lands at issue here are designated forestlands from which the Proposed Np Buffer Rule will remove potential future productivity. There is a “complete lack of engagement with the environmental portion of the SEPA checklist,”¹⁹ and the threshold determination fails to take into account WAC 197-11-330(5), which states:

A threshold determination shall not balance whether the beneficial aspects of a proposal outweigh its adverse impacts, but rather, shall consider whether a proposal has any probable significant adverse environmental impacts under the rules stated in this section. For example, proposals designed to improve the environment, such as sewage treatment plants or pollution control requirements, may also have significant adverse environmental impacts.

By not completing Part B of the Checklist the Forest Practices Board fails to identify potentially significant adverse impacts of its proposed new buffers and thus fails to satisfy prima facie compliance with SEPA’s procedural requirements. For example, section B.8 of the Checklist, “Land and shoreline use,” requires an evaluation of the impacts of the proposal on “working forest lands” as well as identification of “[p]roposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance.”²⁰ The Board’s SEPA Checklist states only that the Proposed Np Buffer Rule “would increase riparian buffers along non-fish bearing perennial streams where forest practices are restricted,” but does not—at all, let alone meaningfully—evaluate significant adverse impacts likely to occur from the sweeping changes to forest practices in Western Washington. The Board assumes, without consideration, that the purported benefits of the Proposed Np Buffer Rule’s stricter buffer requirements will outweigh its adverse impacts. This is just one example. There are numerous other shortcomings. As discussed below, there are probable significant adverse impacts from the Proposed Np Buffer Rule. The Board must withdraw its DNS and commence a new threshold determination that satisfies prima facie compliance with SEPA’s procedural requirements.

¹⁵ *Id.* at 825.

¹⁶ *Id.* (emphasis in original).

¹⁷ *Id.* at 823-24.

¹⁸ *Id.* at 824 (internal citations omitted).

¹⁹ *Id.* at 825.

²⁰ WAC 197-11-960.

II. The Proposed Np Buffer Rule Will Have Significant Probable Impacts on the Environment and the Board Must Issue a DS and Prepare an EIS.

SEPA mandates preparation of an EIS when significant adverse impacts on the environment are probable.²¹ Here, the Board's SEPA Checklist and DNS unlawfully omitted numerous, probable adverse impacts on environment. If the Board lawfully executed its SEPA obligations, it would determine that the Proposed Np Buffer Rule will have significant probable adverse impacts on the environment, issue a DS and provide notice of that decision with an opportunity to comment on the scope of the EIS.

A. The Board Must Consider the Proposed Np Buffer Rule's Conflict with State Law when Evaluating its Impacts.

In determining an impact's significance as part of the SEPA threshold determination, the Board must take into account whether "[a] proposal may to a significant degree . . . [c]onflict with local, state, or federal laws or requirements for the protection of the environment."²² Perhaps the clearest and most effective starting point to see why the Board's DNS issuance and failure to issue an EIS is fundamentally at odds with SEPA is to consider how the Proposed Np Buffer Rule is inconsistent with state statutes governing forest practices and state water quality rules.

Over 25 years ago, the Legislature found "that that the forestry industry, small landowners, tribal governments, state and federal agencies, and counties have worked diligently for nearly two years to reach agreement on scientifically based changes to the forest practices rules" as set forth in the 1999 Forest and Fish Report.²³ The Legislature declared that amendments to forest practices rules based on the Forest and Fish Report would lead to, among other things, "[s]almon habitat that meets riparian functions vital to the long-term recovery of salmon," "the implementation of scientifically based adaptive management and monitoring processes for evaluating the impacts of forest practices on aquatic resources," "and a process for amending the forest practices rules to incorporate new information as it becomes available."²⁴ The current Np Buffer Rule is indeed based on the Forest and Fish Report.

The Legislature envisioned that science in adaptive management would be used to arrive at regulatory solutions that protect commercial forest management. The Legislature found that "scientifically based adaptive management" would enable "protection of aquatic resources to the maximum extent practicable consistent with maintaining commercial forest management as an economically viable use of lands suitable for that purpose" and "provide a regulatory climate and structure more likely to keep landowners from converting forestlands to other uses that would be less desirable for salmon recovery."²⁵ The Legislature further recognized that:

the adoption of forest practices rules consistent with the forests and fish report as defined in RCW 76.09.020 will impose substantial financial burdens on forestland owners which, if not partially offset through other changes in the laws and rules governing forestry, could lead to significantly reduced silvicultural investments on nonfederal lands, deterioration in the quality, condition, and amounts of forests on those lands, and long-term adverse effects on fish and wildlife habitat and other environmental amenities associated with well managed forests.²⁶

The Legislature only allowed the Board to change its original rules if the Board's adaptive management process showed that the original Forest Practices Rules were not achieving resource objectives.²⁷ Resource objectives are designed to ensure, among other things, that forest practices will not significantly impair the capacity of aquatic

²¹ RCW 43.21C.031.

²² WAC 197-11-330(3)(e)(iii).

²³ RCW 77.85.180(1).

²⁴ *Id.*

²⁵ *Id.* Reducing the potential for forest land conversion was a reason provided in support of adopting Alternative 2 in the Final Environmental Impact Statement prepared by National Marine Fisheries Service and the US Fish & Wildlife Service. "Alternative 2 landowners would be less likely to convert their forestlands to other, non-forestry uses that would take those lands out of the FPHCP covered land base as compared to Alternative 1 (No Action) Scenario 1, Alternative 3, and Alternative 4." Forest Practices Habitat Conservation Plan (HCP) - Final Environmental Impact Statement (FEIS) at P-2

²⁶ RCW 77.85.180(4).

²⁷ RCW 76.09.370(7).

habitat to meet or exceed water quality standards (protection of beneficial uses, narrative, and numeric criteria, and antidegradation).²⁸ The Legislature specified that in determining whether the current rules are meeting resource objectives and in making recommendations to the Board, the adaptive management process must use the best available science and information, and standards.²⁹

The Proposed Np Buffer Rule conflicts with the Legislature's intent for scientifically based adaptive management, regulatory stability, protection of commercial forest management in balance with protection of natural resources, and the Legislature's declaration that the Board may only amend its rules if adaptive management showed the original rules were not achieving resources objectives. The heart of this conflict, and the entire basis for the Proposed Np Buffer Rule, is a misinterpretation and misapplication of the state's Tier II Antidegradation water quality standard, WAC 173-201-320. As explained in Final Report for Type Np Buffer Alternative Dispute Resolution, from which the Proposed Np Buffer Rule emerged, the key issue in dispute was, and remains, the Washington Department of Ecology's ("Ecology") interpretation of Tier II antidegradation water quality standards: "[t]he central disagreement among the parties was regarding the amount of change in buffer prescriptions that would be needed from current rules to meet the anti-degradation water quality temperature standard" and "increased buffer widths and lengths needed to result in less than .3-degree Celsius increase [i.e., "measurable change,"] in stream temperatures (to meet anti-degradation standards)."³⁰

During development of the Proposed Np Buffer Rule, Ecology stated that ≥ 0.3 °C temperature increase (measurable temperature change) post-timber harvest was not allowed and violated the Tier II standard in WAC 173-201-320. The Board and its adaptive management process advanced the Proposed Np Buffer Rule based on this inaccurate guidance. However, Tier II, which has been around for more than 20 years, has never before been used in the manner dictated by Ecology in developing the Proposed Np Buffer Rule. As Ecology explained in 2003 when it developed the current iteration of its Tier II rule, temperature increase that does not violate water quality criteria is not a violation of state water quality law:

Allowing degradation that doesn't violate the water quality criteria established to protect uses is consistent with state and federal laws and regulations on antidegradation. Tier II just ensures that such degradation is necessary and that it provides compensating public benefits.³¹

And regarding the measurable change concept, Ecology explained in 2003 that it was simply a screening tool to determine which discharges subject to the Tier II law warrant Tier II review:

The measurability factors are just a screen for sorting out which discharges are significant enough to warrant a Tier II review. It is not intended to capture every one, and the water quality criteria are in place to guard against tipping the balance for the health of a waterway.³²

The Board's SEPA Checklist suggests the proposed action is necessary to meet water quality standards for the protection of aquatic resources, restating Ecology's misrepresentation of Tier II law: "current rules do not always meet state water temperature criteria" because "the state water quality measurable change standards permit no temperature increase of 0.3°C or greater" and citing to WAC 173201A-320.³³ But as Ecology explained in 2003, Tier II expressly allows actions that have measurable temperature change where necessary and have compensating public benefits; measurable change does not exceed or violate Tier II; measurable change is simply an screening tool in determining whether Tier II analysis is required for actions subject to Tier II requirements. Ecology's April 24, 2025 Tier II memo to the Board finally acknowledges temperature change ≥ 0.3 °C is not a limit, reversing themselves and calling into question the underlying basis for the Proposed Np Buffer Rule and the Board's decision to exclude

²⁸ WAC 222-12-045(2)(a)(ii)(C).

²⁹ RCW 76.09.370(7).

³⁰ Triangle Associates, Final Report for the Type Np Buffer Alternative Dispute, Timber Fish & Wildlife Committee, p. 4-5 (September 12, 2022).

³¹ Ecology Responsiveness Summary, WAC 170-201A Surface Water Quality Standards for the State of Washington, Publication No. 03-10-060, p. 108 (July 1, 2003) (hereafter "Ecology 2003 Responsiveness Summary").

³² Ecology Responsiveness Summary at 103.

³³ Board SEPA Checklist at 3.

legitimate Np buffer alternatives from the rule making analysis.³⁴ Completed studies of the effects of the current Np Buffer Rule cited in the SEPA Checklist suggest water quality criteria are already generally being met or exceeded.³⁵ The SEPA Checklist's brief and conclusory summary of benefits to plants, animals, fish, and marine life from the Proposed Np Buffer Rule are wildly exaggerated with no relevant scientific substantiation.

Ecology's alternating interpretation of Tier II, and the Board's uncritical acceptance of the same, is the antithesis of the legislature's regulatory stability intent expressed in RCW 77.85.180 and contrary to the Board's resource objective standard by which current rules must be assessed prior to amendment. Undermining regulatory stability, the primary benefit of voluntary conservation agreements for private landowners, will result in private landowners not availing themselves of those types of agreements in the future. Further, it may hasten private landowners to re-evaluate the benefit of current agreements, reducing participation in those agreements or exiting them altogether. And, given the loss of regulatory stability, private forest landowners may be more motivated to subdivide and/or sell off existing ownership for higher and better use. These are relevant SEPA analysis issues and impacts associated with the proposed action. The Board's SEPA Checklist response in D7, however, does not acknowledge the conflict with state law. It flatly, and wrongly, concludes that the Proposed Np Buffer Rule is consistent with the Forest Practices Act and the federal Clean Water Act as implemented by state water quality standards. The Board's SEPA analysis must take into account the Proposed Np Buffer Rule's conflict with state law when determining the significance of its impacts as part of the SEPA threshold determination. The Board's SEPA Checklist and DNS fails to do so as required by WAC 197-11-330(3)(e)(iii).

Further, the Board's SEPA analysis must account for the Legislature's finding in RCW 77.85.180(4) that the adoption of forest practices rules will impose substantial financial burdens on forest landowners that could have significant adverse impacts to the "quality, condition, and amounts of forests on those lands, and long-term adverse effects on fish and wildlife habitat and other environmental amenities associated with well managed forests." Contrary to the Legislature's clear findings, the Board's SEPA Checklist and DNS ignores these financial burdens and all probable adverse impacts from the Proposed Np Buffer Rule that are likely to flow from such burdens. There are many and they warrant the Board's preparation of an EIS.

B. The Proposed Np Buffer Rule Will Have Significant Probable Adverse Impacts

The Proposed Np Buffer Rule is a significant proposal that will indeed impose substantial financial burdens on forest landowners and severe economic hardship on the viability of the state's timber products industry, all resulting in broader adverse environmental, social, and economic impacts. The Proposed Np Buffer Rule will preclude the use of up to 235,000 acres of forestland in Western Washington, eliminating up to 112 million board feet (MMBf) of log supply from the Western Washington forest products market and foreclosing voluntary carbon market opportunities for affected landowners.³⁶ Eliminating up to 112 MMBf of log volume is equivalent to losing 1-2 mid-sized sawmills, nearly 2,000 direct jobs, and enough wood to build 10,000 - 15,000 homes annually.³⁷ This represents up to 7% of the total private land harvest in Washington 2023.³⁸ The harvest volume from private lands in 2023, the most recent full-year data available, was the third lowest in nearly 100 years. The only two lower years were 2009 during the Great Recession and 1932 during the Great Depression. The ongoing decline in harvest has contributed to mill closures across the Pacific Northwest (PNW).³⁹

The Board's own preliminary economic analysis for the Proposed Np Buffer Rule documents decreased forest land values of up to \$1 billion that will be borne by forestland owners in Western Washington.⁴⁰ This estimate is based on

³⁴ See Ecology, Preliminary Draft Tier II Analysis for the Washington Forest Practices Board's Proposed Western Washington Type Np Waters Buffer Rule, p. 12 (May 2025).

³⁵ Meeting or exceeding water quality standards is one of the Forests and Fish Report's overall performance goals - Schedule L-1. The performance target for temperature is the designated use water quality *criteria* - see Schedule L-1.

³⁶ Mason, Bruce & Girard, Natural Resource Consultants, Type Np Cost Benefits Analysis: Preliminary Results, p. 7, 8, and 15 (May 8, 2025) (hereafter "MBG Type Np CBA"). WFPA provided this report to the Board in May 2025.

³⁷ See MBG Type Np CBA at 9.

³⁸ MBG Type Np CBA at 8. The Washington Department of Revenue found 1,640,970 Mbf (1.64 billion board feet) were harvested from private lands in Washington in 2023, the most recent year for which full-year data is available.

³⁹ MBG Type Np CBA at 8-9.

⁴⁰ Industrial Economics Incorporated, Washington State Type Np Water Buffer Proposed Rule, Final Preliminary Cost-Benefit Analysis, p. ES-6 (April 23, 2025) (hereafter "IEc Preliminary CBA").

45-year commercial harvest rotation, but all incurred in the first year the Proposed Np Buffer Rule would go into effect. It is also worth noting that, typically, commercial forestland is valued over multiple rotations; thus the \$1 billion in lost value only accounts for the first harvest rotation after the Proposed Type Np Rule is in effect. In addition to forgone timberland value as a result of the Proposed Np Buffer Rule, independent economic analysis prepared on behalf of WPFA by a qualified natural resource consultant estimates broader, regional economic wage, revenue, and state and local harvest tax losses at \$157 million to \$315 million per year, with approximately \$5 billion to \$8 billion in total impact over 45 years.⁴¹ These impacts will be concentrated in economically distressed rural areas.

The Board's SEPA Checklist does not mention or consider any of these issues. These are not trivial effects occurring in isolation and cannot be ignored or brushed aside with inadequate SEPA analysis. Nor does the Board's SEPA Checklist consider the adverse direct, indirect, and cumulative environmental impacts, including those the Legislature recognized were likely to occur from forest regulation, like the Proposed Np Buffer Rule, with substantial financial and economic burdens.

Foreseeable Increased Risk of Forestland Disturbance and Conversion.

The forest products market is an integrated economic sector, factors affecting one component affect the others. The ongoing decline in harvest volume in the Pacific Northwest is resulting in saw and paper mill closure and contraction of markets. The Proposed Np Buffer Rule will likely exacerbate this trend. Market contraction drives management costs up, which can result in management decreasing or ceasing altogether. This in turn increases forest disturbance risks from pests, disease and wildfire and/or forestland to be eventually sold off for higher and better use (because combined land value and property tax increases from development pressure would mean forestry practices are no longer the highest and best use).⁴² These increased risks have probable and significant environmental impacts to the earth, air, water, plants and animals, including salmon recovery, that must be analyzed under SEPA. However, the Board's SEPA Checklist responses at D1, D2, D4, and D5 do not acknowledge these probable impacts. It summarily concludes the Proposed Np Buffer Rule will have only benefits and not encourage land uses incompatible with forestry.

The proposed rule is projected to impose compliance costs up to \$1 billion, and could foreseeably render forestry operations economically infeasible on thousands of acres of private timberland. This dynamic creates strong incentives for landowners to subdivide and convert these lands to more intensive, permanent land uses, such as rural residential subdivisions or other forms of development.⁴³ Conversion of forestland leads to well-known environmental consequences, including: habitat fragmentation and loss, increased impervious surfaces and stormwater runoff, traffic generation, carbon emissions from construction and vehicle use, and strain on public services and utilities. The Board must analyze these issues in an EIS.

Foreseeable Carbon Emissions and Energy Impacts from Leakage and Displacement.

In addition to increased forestland disturbance, subdivision, and conversion risks, displacing up to 112 MMBf from the forest products market in Western Washington will likely result in harvest leakage⁴⁴ and product substitution. The demand for forest products is slowly expanding and lost volume in one region will be replaced by volume from another region or imported from out of country, which will result in an increase in carbon emissions on top of carbon increases associated with forestland conversion to other uses. Washington has amongst the best tree growing ground in the U.S.; no other region in the U.S. can produce equivalent volume/acre, therefore more acres will be harvested

⁴¹ MBG Type Np CBA at 10. These calculations from the MBG Type Np CBA have overlap with figures from the IEc Preliminary CBA (e.g., \$167M - \$771M in annual regional economic impact).

⁴² There are many complex factors effecting forestland conversion rates, regulation is just one of them. However, ongoing conversion is happening, more than 400,000 acres in the last 20 years. The state should be incentivizing the long-term maintenance of forested acres rather than disincentivizing it through high cost, low benefit regulatory proposals.

⁴³ See e.g., Bradley et al., Future of Washington's Forest and Forest Industries Study, Study 4: Forest land conversion in Washington state, University of Washington, 2007 (identifying the complex relationship between factors which contribute to forestland conversion, regulatory uncertainty is one of them); Rabotyagov et al., Washington's Small Forest Landowners in 2020: Status, trends and recommendations after 20 years of Forests & Fish, University of Washington School of Environmental and Forest Sciences, p. 145, January 11, 2021 (Funded by Washington State Legislature) (same, including "We argue that a higher frequency of FF survey respondents reporting past forest land sales may be an indication of riparian regulations causing forest land sales.").

⁴⁴ Wear and Murry, 2004, found Northwest Forest Plan harvest leakage outside the Western U.S. to be 84%.

elsewhere to make up the difference.⁴⁵ Washington also has amongst the lowest manufacturing energy costs and emissions in the country; manufacturing forest products elsewhere will use more energy with more carbon emissions.⁴⁶ These foreseeable carbon increases associated with the Proposed Np Buffer Rule have probable and significant environmental impacts to air emissions, energy and natural resources that must be analyzed under SEPA. The Board's SEPA Checklist responses at D1 and D3 do not acknowledge these probable risks. It, again, summarily concludes the Proposed Np Buffer Rule will have only benefits and no adverse air emission or energy impacts.

The Board must analyze these air, energy and other environmental impacts associated with the Proposed Np Buffer Rule in an EIS. In doing so, the Board must consider the state's greenhouse gas reduction objectives and Legislative support for Washington's working forests in protecting air and water quality and wildlife. Washington's Legislature identified Washington's *existing* forest products sector, including private working forests, harvesting, transportation, and manufacturing sections, as industry that "currently operates as a significant net sequesterer of carbon" and is therefore "an integral component of the state's contribution to the global climate response and efforts to mitigate carbon emissions."⁴⁷ The Legislature found that achieving the state's carbon reduction goals requires:

supporting . . . the economic vitality of the sustainable forest products sector and other business sectors capable of sequestering and storing carbon. This includes support for working forests of all sizes, ownerships, and management objectives, and the necessary manufacturing sectors that support the transformation of stored carbon into long-lived forest products while maintaining and enhancing the carbon mitigation benefits of the forest sector, sustaining rural communities, and providing for fish, wildlife, and clean water. . . . Support for the forest sector also ensures the state's public and private working forests avoid catastrophic wildfire and other similar disturbances and avoid conversion in the face of unprecedented conversion pressures.⁴⁸

The Legislature further declared:

it is the policy of the state to support the contributions of all working forests and the synergistic forest products sector to the state's climate response. This includes landowners, mills, bioenergy, pulp and paper, and the related harvesting and transportation infrastructure that is necessary for forestland owners to continue the rotational cycle of carbon capture and sequestration in growing trees and allows forest products manufacturers to store the captured carbon in wood products and maintain and enhance the forest sector's role in mitigating a significant percentage of the state's carbon emissions while providing other environmental and social benefits and supporting a strong rural economic base. It is further the policy of the state to support the participation of working forests in current and future carbon markets, strengthening the state's role as a valuable contributor to the global carbon response while supporting one of its largest manufacturing sectors.⁴⁹

Foreseeable Socioeconomic Effects with Environmental Consequences.

The Proposed Np Buffer Rule will reduce the volume of board feet available to local mills, likely leading to mill closures and losses of nearly 2,000 direct logging and manufacturing jobs primarily in economically distressed rural areas. Indirect and induced job losses could more than double the total direct jobs lost. Compounding these impacts, the Proposed Np Buffer Rule will result in millions of dollars in yearly state and local harvest tax losses, concentrated in economically distressed rural areas. Continuing to hollow out the economic opportunity and tax base of rural areas creates a cascade of adverse economic, environmental, and social impacts from increased travel for employment, loss of active forest management, and increased emissions from transport to more distant mills, to decreased physical and

⁴⁵ See Working Forests Carbon Blueprint, available at <https://www.workingforestscarbonblueprint.org/>. Calculations are based on information in the following source: Smith, James E. et al., Methods for Calculating Forest Ecosystem and Harvested Carbon with Standard Estimates for Forest Types of the United States. Pennsylvania: USDA Forest Service, 2006, available at https://www.fs.usda.gov/ne/newtown_square/publications/technical_reports/pdfs/2006/ne_gtr343.pdf.

⁴⁶ See Working Forests Carbon Blueprint. Calculations are based on information in the following source: U.S. Energy Information Administration, Energy-Related CO₂ Emissions Data Tables, available at <https://www.eia.gov/environment/emissions/state/>.

⁴⁷ See RCW 70A.45.090(1)(a).

⁴⁸ RCW 70A.45.090(1)(b).

⁴⁹ RCW 70A.45.090(1)(c).

mental wellbeing, increased addiction, crime and suicide rates and overall community economic decline. Several Pacific Northwest towns and cities have never recovered from the harvest reductions associated with the 1993 Northwest Forest Plan. Given the recent low levels of annual harvest volume, the Western Washington forest products market could be at a tipping point, with further reductions precipitating a downward spiral which may not be recoverable. These indirect and cumulative effects are completely absent from the Board's SEPA Checklist and DNS. The Board's SEPA Checklist response at D6 summarily concludes that the Proposed Np Buffer Rule will have no impacts to transportation and public services. The Board must analyze these probable and significant socioeconomic and environmental impacts associated with the Proposed Np Buffer Rule in an EIS.

C. The Board Must Issue a Threshold DS and Prepare an EIS

Given the legally deficient analysis and disclosure in the Board's SEPA Checklist and DNS, the Board must redo its threshold determination. And given the controversy over the Proposed Np Buffer Rule, namely its conflict with state law governing forest practices and water quality, combined with the probable significant adverse environmental, social, and economic impacts of the Proposed Np Buffer Rule outlined above, the Board must issue a DS and prepare an EIS.

This is a justified, lawful next step and consistent with the Board's and DNR's past practice. For instance, in 2001, the Board completed an EIS when it adopted the Board's permanent rules in accordance with the Forest and Fish Report.⁵⁰ The Board prepared an EIS even though the stated purpose of the permanent rules was to increase environmental protections; there the Board acknowledged that the final EIS would provide important information that the Board needed to finalize new, permanent Forest Practices Rules.⁵¹ In its EIS for a 2006 update to the Forests Resource Plan, DNR said, "The probable significant adverse environmental impacts analyzed in a non-project EIS are those impacts foreseeable at this stage, before specific project actions are planned."⁵² In a Board-drafted EIS on Road Maintenance and Abandonment Planning, the Board considered the proposed rule's possible effects to be significant enough to warrant further analysis.⁵³

III. The Board's SEPA Analysis Must Consider Reasonable Alternatives

SEPA requires lead agencies, such as the Board here, to "[s]tudy, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources."⁵⁴ This requirement to study alternatives applies to the preparation of a checklist regardless of whether an EIS is prepared.⁵⁵ In preparing its checklist for the Proposed Np Buffer Rule, as well as the EIS that should be prepared, the Board must consider reasonable alternatives to Proposed Np Buffer Rule.⁵⁶ A reasonable alternative is one "that could feasibly attain or approximate a proposal's objectives, but at a lower environmental cost or decreased level of environmental degradation."⁵⁷

At minimum, reasonable alternatives in the EIS should include both a no-action alternative (the current Np Buffer Rule) and the Np Buffers outlined in the Minority proposal. The Board's basis for previously excluding the Minority proposal, it will not meet water quality standards, is incorrect and unsupported by evidence. The Minority proposal

⁵⁰ Final Environmental Impact Statement for the Forest and Fish Rules, Forest Practices Board (2001).

⁵¹ *Id.* at p. 1-12-1-13 (2001).

⁵² Final Environmental Impact Statement on the Policy for Sustainable Forests, Dep't of Nat. Res., p. 1-2 (Jun. 2006).

⁵³ Final Environmental Impact Statement on Forest Practices Road Maintenance and Abandonment Planning (RMAP), Forest Practices Board, 1-3 to 1-4 (Apr. 2006).

⁵⁴ RCW 43.21C.030(2)(e).

⁵⁵ *Wild Fish Conservancy v. Dep't of Fish & Wildlife*, 198 Wn.2d 846, 862, 502 P.3d 359 (2022) ("[T] subsection (2)(e) alternatives analysis is independent of the alternatives requirement under an EIS. Therefore, an agency may be required to assess alternatives to a proposal that is not likely to result in significant adverse environmental impacts."). The Supreme Court's explanation of what is meant by "unresolved conflict" in RCW 43.21C.030(2)(e) demonstrates that the Proposed Np Buffer Rule entails just such an unresolved conflict. *See id.* at 864-65. The Proposed Np Buffer Rule will preclude all other uses of up to 235,000 acres of forestland that would otherwise be available for the forestry use intended under the Forest Practices Act. Given the unresolved conflict over the use of these 235,000 acres, the Board's threshold determination for the proposal was required to include an alternatives analysis under RCW 43.21C.030(2)(e). In addition to legal flaws enumerated in Section I of this comment letter, the Board's DNS is clearly erroneous for failing to include an alternatives analysis.

⁵⁶ RCW 43.21C.030(2)(c)(iii); WAC 197-11-030.

⁵⁷ WAC 197-11-786.

could meet or exceed water quality standards given that completed scientific studies found the current Np Buffer Rule by in large meets or exceeds water quality criteria. The Minority proposal provides an alternative approach to unresolved conflicts regarding the use of the forest resources. It is an appropriate alternative because, like the Proposed Np Buffer Rule, it seeks to reduce thermal effects on Np stream segments by increasing the buffer requirements from those currently required under Forest Practices Rule while, also like the Proposed Np Buffer Rule, allowing some deviation from existing temperature conditions. And the Minority proposal is likely to see less of the adverse impacts described above.

Further, given Ecology's recent acknowledgement that temperature change ≥ 0.3 °C is allowed and the Proposed Type Np Rule may exceed this amount occasionally, there is no legitimate basis to exclude other less costly (economically and environmentally) alternatives which increase protection over the current Np Buffer Rule. As explained in Section II.A., the adaptive manage and rulemaking process that produced the Proposed Type Np Rule was in conflict with state statutory requirements for forest practices and water quality rules (namely, the plain language and proper implementation of Tier II Antidegradation rules). The Board should take this opportunity to reconsider the substantive flaws in the rulemaking and send this back to the adaptive management process to ensure that any proposed rule and its reasonable alternatives comports, both procedurally and substantively, with applicable law including SEPA.

IV. Conclusion

For the reasons stated above, the Board's SEPA Checklist and DNS are legally deficient and should not have been issued. The Board's cursory DNS shortchanges the public from meaningful engagement in the Board's decision-making process and is contrary to SEPA's purpose, policies, and procedural requirements. The Board must withdraw its DNS and conduct a threshold SEPA determination consistent with law. For the reasons discussed in Section II.A. of this letter, the Proposed Np Buffer Rule conflicts with state law governing forest practices and water quality and the Board should therefore consider withdrawing the proposal altogether. If it does not, the Board must issue a DS and prepare an EIS because the Proposed Np Buffer Rule will have significant probable adverse environmental, social, and economic impacts. The EIS must include an analysis of reasonable alternatives such as the Minority proposal.

Sincerely,



Jason S. Spadaro
Executive Director
Washington Forest Protection Association



P.O. Box 1010
Chehalis, WA 98532
Phone (360) 388-7074
info@wafarmforestry.com
www.wafarmforestry.com

June 3, 2025

Washington Forest Practices Board
1111 Washington St SE
PO Box 47012
Olympia, WA 98504-7012
Sent via email to:

Forest.practicesboard@dnr.wa.gov

Cc: Senator Mike Chapman, Chair Senate Agriculture and Natural Resources committee
Representative Kristine Reeves, Chair House Agriculture and Natural Resources committee
Owen Roe, Senior Policy Advisor for Natural Resources, Office of the Governor

Re: Np Buffer Rulemaking Cost/Benefit Analysis (CBA) and Small Business Economic Impact Statement

The Washington Farm Forestry Association (WFFA) is a membership based non-profit organization that has served as the voice for small forest landowners since 1953. Our objectives include educating small landowners about improved management of forest land, and representing small forest landowners in the legislative process and by participation in the Adaptive Management Program Cooperative Monitoring, Evaluation and Research (CMER) and TFW Policy committees. WFFA also supports educational efforts directed towards the general public regarding the contribution of small forest landowners to the environment and rural economies in Washington. Our members are a part of the forest sector. They represent a cohort of (mostly) larger small forest landowners who contribute to the forest economy while providing intergenerational stewardship of the forests under their care. WFFA submits the following information for the record and to aid in decision making at the Forest Practices Board's (FPB) June 6, 2025 meeting on Non-fish Perennial (Np) buffer rulemaking (hereafter Np rule).

Industrial Economics Corp (IEc) was retained to complete the Cost Benefit Analysis (CBA) and Small Business Economic Impact Statement (SBEIS) for the Np rule as required for rule changed under Washington statute. A WFFA volunteer with over 50 years of forest land appraisal expertise participated in the ad hoc advisory committee to IEc while they completed the CBA and SBEIS. Over the past year WFFA has provided detailed comments to support IEc, including links to data sources on small forest landowners when IEc asserted there were no data available. IEc chose to ignore all that information. The cavalier attitude towards asserting that there were no data to assess small forest landowner impacts was so egregious that we were forced to do some analysis of our own. We had the University of Washington Natural Resource Spatial Informatics Group ([UW team](#)) complete an assessment of immediate impacts of the Np rule. The UW Team developed Washington's forest land database starting with its first iteration in 2007, with [major updates in 2019](#), and then a significant improvement in [timber volume assessment](#) completed in 2024 in response to the Climate Commitment Act request for methods to aggregate carbon data for small forest landowners. Their unique state-of-the-art database was used to generate spatially explicit estimates of the impact of the proposed Np rule on western Washington's private forest landowners.

Unlike the other analyses submitted for this rule, (i.e. IEC CBA and the WFFA CBA), the UW Team's forestland database isn't a sample. It's a census. It maps every parcel, who owns it, identifies all forest land down to an acre in size, and integrates it with about 60 data layers in a sophisticated GIS system that can assess nearly any natural resource within Washington's boundary. The database has been used by nearly every natural resource state agency in Washington over the past 2 decades to answer their critical questions. From it we know that over 400,000 stream segments in the DNR hydro layer are untyped, meaning that they are predicted to be non-fish, but it is unknown if they are seasonal (Ns) or perennial (Np). It is also known from prior studies that the DNR hydro layer underestimates the number of streams found when field work commences prior to a timber harvest so estimates built from the hydro layer are likely to be an under-estimate of total impact.

Given that caveat, the UW Team applied the complicated formulas proposed in the Np rule to develop a robust estimate of the change in harvestable acres, timber volume, timber value and carbon value under current rule and under the Np rule proposal. Using the ratio of typed Np to Ns (60%) found in the hydro layer to estimate Np stream length and combining those values with currently typed Np waters the UW Team found that there are 204,000 – 206,000 acres that would no longer be harvestable under the Np rule. This accounts for partial harvest opportunities in the outer parts of the Np rule buffer. This is near the midpoint of the WFFA CBA and more than the IEC estimated upper bound.

Gradient Nearest Neighbor (GNN) data were used by IEC to generate their timber volume and value estimates. The UW Team used their (2024) AI model based on remote sensing, digital aerial photogrammetry (DAP), and all available DNR and USFS Forest Inventory and Analysis (FIA) plot data, to create species and volume estimates that are 25% better than the GNN (gradient nearest neighbor) data as determined by USFS evaluations of each method.

Using Department of Revenue (DOR) data by species they calculated total stumpage value that would be lost to private landowners under the proposed rule. They were also able to generate an estimate of carbon value that would be taken from landowners if the rule is adopted. The changes in harvestable timber value are shown in Table 1 by county. Estimated lost value in Table 1 assumed Type Np streams would be closest to the Type F waters (Np Packed) and remove 204,000 acres from production. Values were calculated for all privately owned forested parcels over 5 acres (minimum size of Designated Forest Land (DFL) parcels).

Table 1 shows that the current standing inventory that would be taken by the Np Rule has a current value of \$1.8 Billion. Lost land value, estimated at a conservative \$900/acre, increases the immediate asset value loss to \$2.0 Billion, or double the upper limit of the IEC CBA cost estimate.

Table 1: Immediate timber asset forfeiture resulting from application of the Np rule on western Washington's Private Forest Landowners by County.

Water Typing Assumption: Buffer 60% of Unknown As Np Packed (closest to fish streams) For all Western Washington Private Forest Lands for parcels with forest cover of 5 acres or more.						
		Estimated immediate stumpage value lost to the proposed Np buffer rule based on species specific log prices from DOR stumpage value tables Jan-June 2025				Timber Excise Tax Impact calculated at 5%
Impact rankin g by lost asset value	County	Current harvestable inventory value	Proposed harvest inventory value	Change in harvestable value	% Change	* (Total not yearly.)
6	Clallam	\$1,837,640,183	\$1,757,123,801	-\$80,516,382	-4.4%	-\$4,025,819
16	Clark	\$922,543,639	\$888,970,039	-\$33,573,601	-3.6%	-\$1,678,680
3	Cowlitz	\$3,597,641,990	\$3,352,262,187	-\$245,379,803	-6.8%	-\$12,268,990
4	Grays Harbor	\$3,407,343,376	\$3,191,309,241	-\$216,034,134	-6.3%	-\$10,801,707
19	Island	\$825,011,669	\$820,971,509	-\$4,040,159	-0.5%	-\$202,008
10	Jefferson	\$1,450,451,504	\$1,395,655,037	-\$54,796,467	-3.8%	-\$2,739,823
9	King	\$2,225,772,010	\$2,159,120,326	-\$66,651,683	-3.0%	-\$3,332,584
17	Kitsap	\$978,078,947	\$962,803,146	-\$15,275,802	-1.6%	-\$763,790
1	Lewis	\$5,130,018,561	\$4,758,848,414	-\$371,170,148	-7.2%	-\$18,558,507
14	Mason	\$1,893,366,546	\$1,852,504,743	-\$40,861,803	-2.2%	-\$2,043,090
2	Pacific	\$2,183,976,439	\$1,924,323,736	-\$259,652,702	-11.9%	-\$12,982,635
7	Pierce	\$2,362,927,135	\$2,286,379,447	-\$76,547,688	-3.2%	-\$3,827,384
18	San Juan	\$971,601,181	\$967,482,473	-\$4,118,707	-0.4%	-\$205,935
5	Skagit	\$2,305,748,777	\$2,207,308,056	-\$98,440,721	-4.3%	-\$4,922,036
15	Skamania	\$676,321,258	\$640,959,589	-\$35,361,668	-5.2%	-\$1,768,083
12	Snohomish	\$2,247,559,137	\$2,199,722,800	-\$47,836,337	-2.1%	-\$2,391,817
13	Thurston	\$1,417,322,453	\$1,372,414,806	-\$44,907,647	-3.2%	-\$2,245,382
8	Wahkiakum	\$625,736,755	\$557,374,538	-\$68,362,217	-10.9%	-\$3,418,111
11	Whatcom	\$1,445,016,503	\$1,394,401,898	-\$50,614,605	-3.5%	-\$2,530,730
	Grand Total	\$36,504,078,062	\$34,689,935,789	-\$1,814,142,273	-5.0%	-\$90,707,114

While the most recent IEc CBA asserts that carbon values are of minimal importance, in prior drafts they asserted that the carbon value of retained buffers provided a worldwide benefit in reduced carbon emissions. Nothing could be further from the truth as life cycle analysis of PNW forests shows that greatest carbon benefit to the atmosphere arises from how wood is used and for how long¹. What is critical in this analysis is that by removing acreage from the forest land base, any opportunity for landowners to avail themselves of carbon value through carbon credit sales is lost. It is lost because carbon credit sales require

¹ <https://corrim.org/wp-content/uploads/2022/11/The-Plant-a-Trillion-Trees-Campaign-to-Reduce-Global-Warming-Fleshing-Out-the-Concept.pdf>

additionality, meaning that carbon left in the forest must be additional to what would have happened without the credit sale. If trees are removed from the harvest land base by regulation, they are no longer additional. Therefore, there is a carbon cost that needs to be included in the analysis. Using a conservative estimate of \$50/ton of carbon, the UW Team calculated that the carbon value lost under the Np rulemaking is \$461M. So, in total the immediate asset value loss to western Washington private forest landowners is easily \$2.275B in today's dollars plus lost land value of \$184M. This DOES NOT include the additional impacts of lost revenue to counties through lost excise tax (\$90M), economic multiplier effects, and loss in future values. Those values, as shown by IEc and the WFFA CBA (\$5-8B), are easily in the multi-billion-dollar range assuming that our mill infrastructure can survive the supply shock that this Np rule would deliver. If the mill infrastructure were to decline, the lost value would be even higher. This immediate asset value loss has been segregated into small forest landowner, industrial and other private in Table 2.

Table 2: Immediate timber and carbon asset forfeiture resulting from application of the Np rule by landowner type for western Washington's Private Forest Landowners.

	WWA SFLO (5-2500 acres)	WWA Industry	Conservation/Utility/ Real Estate and NIPF> 2500 ac	WWA All Private
total lost timber value	-\$276,884,015	-\$1,455,510,007	-\$81,748,251	-\$1,814,142,273
total lost carbon value	-\$69,221,564	-\$372,289,183	-\$19,913,690	-\$461,424,438
total lost timber and carbon value	-\$346,105,579	-\$1,827,799,191	-\$101,661,941	-\$2,275,566,711

Simply put, these data do not support the Forest Practices Board accepting the CBA and SBEIS findings as sufficient to proceed with the Np rulemaking as a least cost alternative. Furthermore, the IEc SBEIS asserts that there will be a disproportionate impact on small forest landowners, though they provide no data to support it. They also assert in the SBEIS that because Washington has a Forest Riparian Easement Program (FREP), landowners will be compensated for this taking. In theory, 90% of the lost timber value could be obtained from the state under RCW 76.13.120 and RCW 76.13.140, if and when small forest landowners have an adjacent commercial harvest with some limits. Estimated **extra** costs from the state coffers for the Np rule change would be in the range of \$250M (90% of 276M) based on current forest inventory and value. WFFA works hard every biennium to advocate for full funding of FREP to meet current needs. In state budget deficit years, we struggle to meet that goal. In state budget surplus years, it's easier, but it is never easy to ensure that the funds are there to meet the need. Assuming FREP will have the funds to triple its payments to small forest landowners is not supported by historical precedent, or by current budget realities.

There is significant variance in the estimates between the three methods that were used to identify impacts (IEc, WFFA CBA, and UW Team). While each method has some scientific uncertainty associated with it, in all cases the impact is massive without any clear and substantial benefit articulated in the CBA. While the proposed Np rule generates significant impacts to all private forest landowners, analysis shows that small private forest landowners take a massive hit to their asset value, lose carbon market opportunities and there is no clear mitigation path and no plan to develop one. Forcing the legislature to use appropriated funds to cover these increased FREP liabilities generated by advancing the Np rule, for perceived public benefit that has not been articulated in the CBA is problematic at best.

In short, the Np rule is the most significant taking of private forestland, since the 1999 Forests and Fish law.

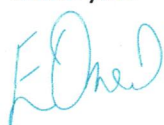
In 1999, we passed a law to protect salmon habitat in forested areas, protect endangered species, provide for clean water, and ensure logging could continue. In this voluntary, negotiated agreement, private forest landowners gave up billions in timber and land value, and spent millions to address roads and water crossings. In return, we were promised 50 years of stability in rules, a collaborative adaptive management process to tweak the rules as necessary, and support for small forest landowners, including a map-based rule. Fast forward 25 years and we are on the cusp of another taking, with no clear plan for the future and certainly no map-based rule. In contrast to 1999, this taking does not address salmon recovery as the streams involved are - by definition - non-fish bearing. Proponents say adding these continuous buffers will result in cooler water flowing into our fish-bearing streams. That may be true, though the paucity of study sites used to develop this rule found insignificant measurable change downstream; none of which exceeded the threshold for beneficial designated uses (16C) needed for our cold-water fish species. On 2 of 14 sites where maximum harvest levels were tested, there were instances of too much temporary warming for some of our fish species, if they had been in these waters. These same tests also showed that current rules on non-fish streams meet the maximum temperature thresholds (designated use threshold for coldwater fish species of which there are none in non-fish streams), even during the hot summers we've had over the past 15 years.

In essence, the Np rule is looking for a problem to solve. The problem came in the form of an interpretation of the Department of Ecology's Tier II Antidegradation standard that was changed in 2017 to assert no temperature change is allowed beyond 0.3C, no matter if the water is already cold enough. At the last minute (May 14th FPB meeting), that interpretation was modified, thus nullifying years of effort to design solutions within the 0.3C temperature change limit.

If this rule is adopted, it will be a definitive nail in the coffin of the forest sector in this state and all the economic, ecological, and social benefits that go with it. So to individual board members my question is: **What greater good do you perceive will be achieved by obliterating an industry, the lifestyle of 1000's of small forest landowners, and all the rural communities that go with it?**

And to the FPB as a whole: **Why is the FPB proposing to remove billions of dollars in value from private forest landowners and the rural forestry dependent communities, for the sake of a rule interpretation that has just been retracted? And What is your justification for accepting a CBA that characterizes an immediate asset forfeiture value of \$2.275B to private forest landowners as somehow less than some amorphous, feel-good qualitative benefits as stated in the CBA you are using to justify the CR102 for the Np rule?** Please pause the Np rule making to look at other options given the recent shift in Department of Ecology language on the 0.3C warming limit.

Thank you.



Elaine Oneil, PhD
Executive Director
Washington Farm Forestry Association
Stewards of the Land, For Generations to Come

EXECUTIVE SUMMARY

Aimee McIntyre, Marc Hayes, William Ehinger, Stephanie Estrella, Reed Ojala-Barbour, Greg Stewart, Dave Schuett-Hames, and Timothy Quinn

Headwater streams are largely understudied relative to their frequency in the landscape, constituting approximately 65% of the total stream length on forestlands in western Washington. We evaluated the effectiveness of riparian forest management prescriptions in maintaining key aquatic conditions and processes affected by Forest Practices for small non-fish-bearing (Type N) headwater stream basins underlain by competent, “hard rock” lithologies (i.e., volcanic or igneous rocks) in western Washington (see Chapter 1 – *Introduction* in this report). We compared current prescriptions to two alternatives, one with longer riparian leave-tree buffers and one with no buffers. We looked at the magnitude, direction (positive or negative), and duration of change for riparian-related inputs and response of instream and downstream components. We evaluated riparian processes affecting in-channel wood recruitment and loading, stream temperature and shade, discharge, suspended sediment export, nutrient export, channel characteristics, and stable isotopes. To evaluate biological response, we selected stream-associated amphibians as a key response variable because they are one of the important biotic resources for protection in non-fish-bearing streams. The results of this study are intended to inform the efficacy of current Forest Practices (FP) rules, including how landowners can continue harvesting wood resources while protecting important headwater habitats and associated species, and meeting resource objectives outlined in the FP Habitat Conservation Plan (FP HCP; Schedule L-1, Appendix N).

We used a Before-After Control-Impact (BACI) study design with blocking to examine how key aquatic resources, conditions and processes responded to riparian buffer treatments. We collected a minimum of two years of pre-harvest data from 2006 until harvest began in 2008, and post-harvest data from 2009 (one year post-harvest) through 2016 or 2017, depending on the response variable (i.e., up to nine years post-harvest; see Chapter 2 – *Study Design* in this report). Study sites included 17 Type N stream basins located in managed second-growth conifer forests across western Washington in three physiographic regions (Olympic Mountains, Willapa Hills and Southern Cascades). Sites were restricted to Type N basins ranging from 12 to 54 ha (30 to 133 ac) underlain by relatively competent lithologies, primarily volcanic flow rocks and breccias, and that were known to support Coastal Tailed Frog (*Ascaphus truei*) and Olympic, Columbia, or Cascade Torrent Salamanders (*Rhyacotriton olympicus*, *R. kezeri*, or *R. cascadae*).

We evaluated four experimental treatments, including an unharvested **Reference** (i.e., withheld from harvest; n = 6) and three alternative riparian buffer treatments with clearcut harvest: **100% treatment** (a two-sided 50-ft [15.2-m] riparian buffer along the entire Riparian Management Zone [RMZ; n = 4]); **FP treatment** (a two-sided 50-ft [15.2-m] riparian buffer along at least 50% of the RMZ, consistent with the current Forest Practices buffer prescription for Type N streams [n = 3]); and **0% treatment** (clearcut harvest throughout the entire RMZ [n = 4]). The timber harvests and associated riparian buffer treatments were implemented between October 2008 and August 2009.

In-channel wood plays an important functional role in Pacific Northwest streams, influencing channel morphology and hydraulics, storage and routing of sediment and organic matter, aquatic

habitat, aquatic communities, and food resources. We found that harvest of timber in and adjacent to streamside riparian forests directly affected tree mortality, tree fall rates, wood recruitment to streams, and in-channel wood loading (pieces/m; see Chapter 3 – *Stand Structure, Tree Mortality, Wood Recruitment and Loading* in this report). The greatest post-harvest change in stand structure occurred in the 0% treatment and the unbuffered portions of the FP treatment where all riparian trees were removed during harvest. A pulse of large wood (≥ 10 cm [4 in] diameter) was recruited to streams adjacent to unbuffered reaches during harvest, with very little additional large wood recruitment in the following eight years. Windthrow was the dominant tree mortality agent in riparian buffers, with the highest mortality in the first two years post-harvest. The highest tree mortality rates and greatest reductions in density and basal area occurred in the FP treatment, where cumulative mortality eight years post-harvest was 51% and 56% of initial basal area and 50% and 68% of initial density for the RMZ and PIP buffers, respectively, compared to a cumulative mortality of 16% and 9% of basal area and 20% and 15% of initial density for the RMZ and PIP in the reference. Windthrow-associated tree fall in riparian buffers increased large wood recruitment to channels in the 100% and FP treatments. However, we found that most recruited trees (>80%) were suspended above the active stream channel. From two to eight years post-harvest, in-channel large wood loading (mean pieces per linear stream meter) continued to increase in the FP treatment, remained relatively stable in the 100% treatment, and decreased in the 0% treatment. The greatest increase in in-channel small wood loading (<10 cm [4 in] diameter) was in the 0% treatment in the two years post-harvest, and was comprised largely of logging slash from timber harvest of the streamside trees. Small wood loading continued to increase in the FP and 0% treatments through five years post-harvest and then declined in all buffer treatments.

Riparian vegetation is an important source of organic matter and macroinvertebrates, nutrients, and cool water to downstream reaches. The shading that this vegetation provides is a dominant control on stream temperature, which in turn is a critical environmental condition for many aquatic organisms and biological processes. Riparian shade decreased and water temperature increased in all buffer treatments after harvest (see Chapter 4 – *Stream Temperature and Cover* in this report). Canopy closure decreased by less than 10% in the 100% treatment but declined 32% in the FP treatment and 87% in the 0% treatment by three years post-harvest. After nine years, canopy closure returned to pre-harvest levels in the 100% treatment, but remained 15% and 27% below pre-harvest values at the FP and 0% treatments, respectively. The seven-day average temperature response increased in the 100% treatment by 1.1°C in the year immediately following harvest but returned to pre-harvest temperatures in the three years post-harvest. In the FP treatment, the temperature response ranged from +0.5 to +1.2°C and changed little throughout the post-harvest period, possibly from the ongoing loss of buffer trees to windthrow. In the 0% treatment, the temperature response was nearly 4°C in the first year after harvest but then steadily declined to a 0.8°C increase by nine years post-harvest. The greatest change in temperature occurred during the July–August period, but temperatures were also elevated in spring and fall at most locations. Substantial (>1.0°C) temperature responses within the harvest unit were attenuated downstream of the harvest unit where the stream had flowed through 100 m or more of unharvested forest or buffers wider than 50 ft. The primary driver of post-harvest temperature increases appeared to be loss of riparian cover. However, there was evidence that basin aspect may have influenced the magnitude of change; and in one locality, hyporheic flow may have mitigated higher temperature within a well-shaded downstream reach.

Changes in stream discharge, and in the sediment loads that are carried by those flows, have been long recognized as common, but highly variable, responses to timber harvest. We measured discharge and suspended sediment export in eight of the study sites, with four sites each (one of each buffer treatment) in the Olympic and Willapa Hills physiographic regions. Total water yield increased in all buffer treatment sites, but treatment effects varied with buffer treatment and climate, with sites receiving the most rainfall (i.e., Olympic block) and the greatest proportion of watershed area harvested (FP and 0% treatments) exhibiting the largest increases (see Chapter 5 – *Stream Discharge, Turbidity, and Suspended Sediment Export* in this report). On average, this study affirms prior literature reports that show discharges increasing 1 to 18 mm/yr for each percent of the watershed harvested, albeit with much variability as a function of buffer treatment, climate, and precipitation. Relative changes in flow were greatest for baseflows and median discharge, but specific discharges increased for all flows up to the 30-day recurrence interval in the FP and 0% treatment sites. Late summer discharge decreased in both 100% treatment sites through eight years post-harvest, presumably because of increased evapotranspiration rates in the residual vegetation during periods of little rainfall. In contrast, harvest did not change the magnitude of suspended sediment export regardless of buffer treatment. Over 11 years of the study, turbidity readings were very low over 95% of the time. Both turbidity and suspended sediment concentration increased with increasing discharge, typically during late fall and early winter storm events, and then rapidly declined. The basins appear to be supply-limited, with the quantity of exported sediment restricted to the quantity of sediment delivered to the stream from the adjacent uplands, and so additional flow (especially non-peak flow) has little ability to affect sediment transport. While discharge increased in all treatments after harvest, suspended sediment export events were episodic, poorly correlated with discharge, and not synchronized across all sites, suggesting that export magnitudes are unrelated to harvest.

Nutrients exported to downstream receiving waters may increase primary productivity, leading to decreases in instream dissolved oxygen from decomposition. Because the watersheds of western Washington drain to the sensitive, confined marine waters of Puget Sound, Grays Harbor, and Willapa Bay, nutrient loading is a potential environmental concern. We measured mean total nitrogen (N) and nitrate-N concentrations for nine years post-harvest in the same eight sites used in our discharge and suspended sediment export components of the study (see Chapter 6 – *Nitrogen Export* in this report). Nitrogen export increased in all treatment sites immediately after harvest, with variable increases among sites ranging from less than 10% to more than three-fold. The estimated change was greatest in the 0% treatment, intermediate in the FP treatment, and lowest in the 100% treatment. Controlling for treatment type, the increases corresponded to the proportion of the watershed harvested. Only the 0% treatment differed statistically from the other treatments. At seven and eight years post-harvest, the eight sites displayed no consistent response in nitrogen concentration or export to the buffer treatments or to the proportion of the watershed harvested: total-N export had declined from their immediate post-harvest levels at three sites and increased slightly at three sites, while nitrate-N export declined from post-harvest levels at four sites and increased slightly at two sites. Only one site, however, had recovered to pre-harvest export rates by eight years post-harvest.

Changes to wood recruitment and loading, stream flow and sediment transport from timber harvest can result in changes to physical stream channel characteristics, particularly channel dimensions and substrate sediment materials. Measurements in the 17 study basins in the years immediately pre-harvest, and again one, two, five and eight years post-harvest, showed some

systematic patterns (see Chapter 7 – *Stream Channel Characteristics* in this report). In the two years post-harvest, we estimated a decline in stream wetted and bankfull widths in the 0% treatment compared to the pre-harvest period after controlling for temporal changes in the reference. This pattern continued through eight years post-harvest. We also measured a post-harvest increase in the proportion of the stream channel dominated by fine sediment substrates in the 0% treatment in the two years post-harvest, which was still evident eight years post-harvest. A similar increase was also estimated for the FP treatment eight years post-harvest, but not in the other sample years. Finally, we estimated an increase in the proportion of the channel rise attributed to in-channel steps in the 0% treatment in all post-harvest sampling years. We suspect that post-harvest changes in stream channel characteristics, primarily in the 0% treatment, can be attributed at least in part to post-harvest increases in in-channel small and large wood recruitment and loading. Wood recruitment and loading increased in all buffer treatments as logging slash and windthrown trees from unharvested RMZs entered the stream channel during and after timber harvest. This may explain the decrease we observed in stream wetted and bankfull widths, despite the observed increase in flows that would normally encourage increases in channel width.

Stable isotope ratios are especially useful for identifying shifts in trophic system organization due to canopy modification, which other researchers have associated with an increase in the contribution of algae to the trophic support of streams. Samples of biofilm, litterfall, instream detritus, macroinvertebrates, and amphibian tissue were collected during the pre-harvest period and one, two and eight years post-harvest (see Chapter 8 – *Stable Isotopes* in this report). Not every group was sampled for all sites in all years (see Tables 8-1 and 8-2 for sample sizes). We found limited and inconsistent differences in carbon (^{13}C) and nitrogen (^{15}N) isotopic signatures among treatments; however, stable isotope signals suggested that the organic matter sources supporting stream biofilm did not appreciably change in response to the buffer treatments. Though we did not detect a notable difference in the biofilm isotopic values between the pre- and post-harvest period, we estimated a decrease in mean $\delta^{13}\text{C}$ for giant salamander larvae in the FP treatment and an increase in the 100% treatment in the two years post-harvest. Over this same period, we estimated a decrease in mean $\delta^{15}\text{N}$ for gatherer invertebrates in the FP and 0% treatments. We found no evidence of an increase in algal content in the biofilm, thus challenging the hypothesis that canopy modification might increase trophic support from autotrophic sources. Our $\delta^{13}\text{C}$ versus $\delta^{15}\text{N}$ comparison of stable isotope data were also used to characterize stream-associated amphibian diet. Results indicated that Coastal Tailed Frog larvae were ingesting primarily biofilm. The post-metamorphic Coastal Tailed Frogs, torrent salamanders and giant salamanders, however, all exhibited stable isotope values that suggested a diet of aquatic predators and shredders, and terrestrial spiders.

Amphibians have experienced declines in local abundance and range contractions as a result of habitat loss and degradation, disease, and competition with introduced species. Stream-associated amphibians are frequently the dominant vertebrates in and along non-fish-bearing headwater streams. We observed the largest post-harvest response for Coastal Tailed Frog (see Chapter 9 – *Stream-associated Amphibians* in this report). In the two years post-harvest we estimated an increase in larval Coastal Tailed Frog density in the FP treatment compared to the pre-harvest period, after controlling for temporal changes in the reference; however, by eight years post-harvest we estimated substantial declines in larval density in all buffer treatments. In the two years post-harvest, post-metamorphic tailed frog density declined in the 100% treatment but increased in the 0% treatment. However, by eight years post-harvest we again estimated

substantial declines in density in the 100% and FP treatments, whereas the change in density in the 0% treatment no longer differed from that of the reference. We estimated an increase in torrent salamander density in the 0% treatment in the two years post-harvest; by eight years post-harvest this increase was no longer evident in the 0% treatment although we estimated a decline in the FP treatment. Finally, for giant salamanders we estimated an initial decline in density in the FP treatment in the two years post-harvest, however, by eight years post-harvest we had no evidence of a difference for any treatment. Our study was designed to evaluate treatment effects, not the mechanisms behind potential changes in amphibian abundance. However, stream temperature, overstory canopy, wood loading, sediment retention, flow dynamics, stream morphology, and nutrients all have been associated with amphibian abundance, and changes documented in these metrics following timber harvest likely explain some or all of the changes in amphibian abundances.

In summary, the greatest effects of alternative buffer treatments were observed in riparian stand condition, large wood recruitment and in-channel wood loading, stream shade and temperature, stream channel characteristics, and stream-associated amphibian densities (see *Appendix A* in this report). The 100% treatment was generally the most effective in minimizing changes from pre-harvest conditions, the FP was intermediate, and the 0% treatment was least effective. The collective effects of timber harvest were most apparent in the 0% treatment in the two years immediately post-harvest. For many metrics, the magnitude of harvest-related change observed for a given treatment diminished over time. The one clear exception to this generality was for the stream-associated amphibians. For these species, treatment effects were largely not evident in the two years post-harvest except for declines in giant salamander density in the FP treatment. However, substantial negative declines were recorded for Coastal Tailed Frog density in the eight years post-harvest, including for larvae in all buffer treatments and post-metamorphic individuals in the 100% and FP treatments. We also estimated a decline in torrent salamander density in the FP treatment in the eight years post-harvest. Continued monitoring of the amphibian response to treatment is strongly recommended to expand on our understanding of the long-term impacts of timber harvest and variable length buffers on stream-associated amphibians.

1. CALL TO ORDER

Mayor Paul Helenberg called the regular meeting of the Castle Rock City Council to order at 7:32 PM.

a. Pledge of Allegiance

Mayor Helenberg led the Pledge of Allegiance.

b. Roll Call

Councilmembers present: Art Lee, Paul Simonsen, and Ellen Rose. Councilmember Lee Kessler was absent. Councilmember #3 is an unfilled position.

Staff present: Police Chief Charlie Worley, City Attorney Benjamin Goodwin, Public Works Director Dave Vorse, Public Works Senior Operator Tyler Stone, City Engineer Tom Gower, and Clerk-Treasurer Carie Cuttonaro.

c. Changes to Agenda

2. PROCLAMATIONS & PRESENTATIONS

3. CITIZEN COMMENTS - maximum 3 minutes

Mike Lee, 312 5th Ave SW, stated they have an ongoing issue with one of their neighbors with noise and bodily harm threats.

Other neighbors joined in on the conversation.

This is a police matter and is currently being investigated. It was requested for neighbors with proof of their stated experiences to submit that proof, and file anti-harassment and no-contact order requests.

4. DEPARTMENT REPORTS

- City Attorney Nikki Thompson

- Police Chief Charlie Worley

- Public Works Director Dave Vorse

Asst Public Works Director Tyler Stone gave a verbal report.

- City Engineer Tom Gower

- Clerk-Treasurer Carie Cuttonaro

Clerk-Treasurer Carie Cuttonaro gave a verbal report.

5. COUNCIL AND AD HOC COMMITTEE REPORTS

- Mayor / Mayor Pro-Tempore / Councilmembers

- CRCDA Representative

6. PUBLIC HEARINGS

7. CONSENT AGENDA

Councilmember Lee made a motion, seconded by Rose, to approve the Consent Agenda as presented. Motion carried by roll call vote. Councilmembers Lee, Simonsen, and Rose voted 'Aye'.

a. June 23, 2025 Regular Council Meeting Minutes

b. June 2025 invoices as described in the Fund Transaction Summary Report in the amount of \$450,511.06.

8. OLD BUSINESS

a. This item was previously tabled at the June 23rd, 2025 meeting and has been updated. Request approval to have specialized engineering and design work completed for installing cathodic protection at the Spirit Lake (504) Reservoir.

Asst Public Works Director Tyler Stone presented.

Councilmember Rose made a motion, seconded by Lee, to approve the specialized engineering and design work for the installation of cathodic protection. Motion carried by roll call vote.

Councilmembers Lee, Kessler, Whalen, Simonsen, and Rose voted 'Aye'.

9. NEW BUSINESS

a. Preliminary Plat for 45 single family residential unit subdivision located in the 8.93 acres residential designated portion of the Landing on the Cowlitz (LOT) Master Plan.

Mayor Helenberg, City Engineer Tom Gower, and Clerk-Treasurer Carie Cuttonaro presented.

Councilmember Lee made a motion, seconded by Rose, to approve the Preliminary Plat with conditions, not including the Park Board recommendations. After further discussion, motion carried by roll call vote. Councilmembers Lee, Simonsen, and Rose voted 'Aye'.

b. Bid Award to Slateco LLC for the 2025 ADA Improvements Project. The total amount is \$291,500.

City Engineer Tom Gower presented.

Councilmember Lee made a motion, seconded by Rose, to approve the Bid Award for the 2025 ADA Improvements Project to Slateco LLC in the amount of \$291,500. Motion carried by roll call vote. Councilmembers Lee, Simonsen, and Rose voted 'Aye'.

c. Authorization No. 2023-003; Amendment No. 1 in the amount of \$64,000; this amendment modifies the original agreement for engineering services executed January 9, 2023 from \$197,500 to \$261,500 for the Carpenter Road Water Pump Station and Powell Road Waterline Extension Project.

City Engineer Tom Gower presented.

Councilmember Lee made a motion, seconded by Rose, to approve Authorization No. 2023-003; Amendment No. 1 in the amount of \$64,000. Motion carried by roll call vote. Councilmembers Lee, Simonsen, and Rose voted 'Aye'.

d. Storage Building Construction Contract with Columbia Groundwork Inc, in an amount not to exceed \$115,000, not including sales tax. Contract is contingent on State of Washington Department of Commerce grant approval.

Mayor Helenberg presented.

Councilmember Rose made a motion, seconded by Lee, to approve the Storage Building Construction Contract with Columbia Groundwork Inc. in the amount of \$115,000 plus sales tax, contingent on grant approval. Motion carried by roll call vote. Councilmembers Lee, Simonsen, and

Rose voted 'Aye'.

e. Striping Proposal with All Stripes LLC for the 2025 Citywide Striping Project. The total amount is \$17,405.50.

Mayor Helenberg presented.

Councilmember Rose made a motion, seconded by Lee, to approve the Striping Proposal with All Stripes LLC for the 2025 Citywide Striping Project in the amount of \$17,405.50. Motion carried by roll call vote. Councilmembers Lee, Simonsen, and Rose voted 'Aye'.

10. OTHER BUSINESS

Added Item

Castle Rock Blooms requests to use City Hall parking lot for the Community Potluck on July 25, 2025 at 6:15 PM.

Councilmember Rose made a motion, seconded by Lee, to approve Castle Rock Blooms request. Motion carried by roll call vote. Councilmembers Lee, Simonsen, and Rose voted 'Aye'.

Commissioner Rick Dahl stated Cowlitz County no longer qualifies as a Rural County, based on population density. This will have an effect on Rural Development funding, taking effect in 2054. The City has been able to utilize these tax dollars, granted by Cowlitz County, to fund several projects.

11. ADJOURNMENT

There being no further business, Mayor Helenberg adjourned the meeting at 8:23 PM.

Mayor Paul Helenberg

Clerk-Treasurer Carie Cuttonaro

As of this date, 8/11/2025, the Council by a majority vote, does approve payment of the vouchers included in the Fund Transaction Summary Report, and further described as:

Payroll Expenditures

<u>Transaction Type</u>	<u>Description & Transactions</u>	<u>Amount</u>	<u>Payment Date</u>
Mid-Month Draw	Payroll Nacha # 1747361	24,150.00	7/15/2025
	Taxes ACH	5,250.00	
EOM Payroll	Payroll Nacha # 1765820	79,621.77	7/31/2025
	26854 - 26856	2,711.31	
	ACH	52,244.65	
	Benefits 26857 - 26859	3,965.95	
	Taxes ACH	46,262.12	
	Voided	-	
Total Payroll Expenditures		214,205.80	

General Expenditures

<u>Transaction Type</u>	<u>Description</u>	<u>Amount</u>	<u>Payment Date</u>
Adjustment/EFT	EFT#1154-7/2025	164.06	7/3/2025
Adjustment/EFT	EFT#1157-7/2025	10.69	7/1/2025
Adjustment/EFT	EFT#1155-7/2025	7,410.50	7/24/2025
Claims	Check 56383 - 56386	3,493.62	7/22/2025
Claims	Check 56387 - 56389	384.17	7/24/2025
Claims	Check 56390 - 56465	332,699.80	7/31/2025
Total General Expenditures		344,162.84	

TBD Expenditures

<u>Transaction Type</u>	<u>Description</u>	<u>Amount</u>	<u>Payment Date</u>
Claims	Check 2801	21,792.88	7/31/2025
Total TBD Expenditures		21,792.88	

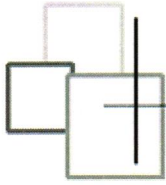
Total Expenditures

	<u>Amount</u>	<u>Payment Date</u>
Total General and TBD Expenditures	365,955.72	7/1/2025 - 7/31/2025
Payroll Expenditures	214,205.80	
Grand Total Expenditures	580,161.52	
Fund Transaction Summary Report	580,161.52	
Balance Check (s/b -0-)	-	

Lee Kessler, Audit Committee Member

Art Lee, Audit Committee Member

Ellen Rose, Audit Committee Member



Fund Transaction Summary

Transaction Type: Invoice
Fiscal: 2025 - Jul - Aug - City Council
System Types: Cash Management, Financials, Payroll, Resources, UB2, Utility Billing

Fund Number	Description	Amount
010	General Fund	\$190,537.44
100	Street Fund	\$37,766.01
115	Building Code Account Fund	\$3,385.98
120	Visitor Center Fund	\$543.10
130	Library Fund	\$629.33
140	Criminal Justice Fund	\$142.50
145	Local Criminal Justice Fund	\$126.05
170	DOT Spoil Site Fund	\$7,023.31
180	Public Works Vehicle Replacement	\$20,529.10
320	Street Construction Capital Fund	\$8,286.47
400	Water/Sewer Operating Fund	\$147,141.07
410	Regional Water System Fund	\$34,126.73
420	Stormwater Management Fund	\$14,317.84
425	Stormwater Capital Reserve Fund	\$4,260.79
435	Muni Water Capital Improvement	\$77,684.04
470	Muni Sewer Capital Imprv Reserve	\$190.74
475	Boat Launch Facility Fund	\$10,242.00
631	Utility Deposit Fund	\$45.78
632	Transportation Benefit District Fund	\$21,792.88
634	State Custodial Pass-Thru Fund	\$1,390.36
	Count: 20	\$580,161.52

**CITY OF CASTLE ROCK
WASHINGTON**

ORDINANCE NO. 2025-10

AN ORDINANCE OF THE CITY OF CASTLE ROCK, WASHINGTON, AMENDING CASTLE ROCK MUNICIPAL CODE SECTION 5.01.110, NONRESIDENT BUSINESSES, PROVIDING FOR SEVERABILITY AND ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, the City requires business licenses for entities conducting business within the City of Castle Rock; and

WHEREAS, the current Castle Rock Municipal Code exempts businesses that are located outside of the City limits from general licensing requirements if their gross sales, income, or product value sold in the City is less than \$2,000; and

WHEREAS, the State is increasing the threshold exemption amount to \$4,000, with automatic CPI adjustments in future years; and

WHEREAS, Castle Rock is required to update its Code to reflect the updated threshold exemption amount.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF CASTLE ROCK, WASHINGTON, DOES ORDAIN AS FOLLOWS:

Section 1. Amendment. Castle Rock Municipal Code, Section 5.01.110, Nonresident Businesses, is hereby amended to read as follows:

5.01.110 Nonresident Businesses.

For purposes of the license required by this chapter, any person or business whose annual value of products, gross proceeds of sales, or gross income of the business in the city is equal to or less than \$2,000 and who does not maintain a place of business within the city shall submit a business license application as provided for in this chapter, but be exempt from the city license fee. The threshold and fee exemption does not apply to regulatory license requirements or activities that require a specialized permit.

Beginning January 1, 2026, the threshold amount is \$4000. The threshold amount will be adjusted every forty-eight months on January 1, by an amount equal to the increase in the Consumer Price Index ("CPI") for "West Urban, All Urban Consumers" (CPI-U) for each 12-month period ending on June 30 as published by the United States Department of Labor Bureau of Labor Statistics or successor agency. To calculate this adjustment, the current rate will be multiplied by one plus the cumulative four-year (forty-eight month) CPI increase using each 12-month period ending on June 30 of each prior year, and rounded to the nearest \$100. However, if any of the annual CPI increases are more than five (5) percent, a five (5) percent increase will be used in computing the annual basis and if any of the annual CPI decreased during the forty-eight-month period, a zero (0) percent increase will be used in computing the annual basis.

Section 2. Severability - Construction. If a section, subsection, paragraph, sentence, clause, or phrase of this ordinance is declared unconstitutional or invalid for any reason by any court of competent jurisdiction; such decision shall not affect the validity of the remaining portions of this ordinance. If the provisions of this ordinance are found to be inconsistent with other provisions of the Castle Rock Municipal Code, the provisions of this ordinance shall control.

Section 3. Authority to Make Necessary Corrections. The City Clerk and the codifiers of this Ordinance are authorized to make necessary corrections to this Ordinance including, but not limited to, the correction of scrivener's clerical errors, references, ordinance numbers, section/subsection numbers and any references thereto.

Section 4. Effective Date. This Ordinance shall take effect five days after its passage and publication as required by law.

PASSED and APPROVED this ____ day of _____, 2025.

CITY OF CASTLE ROCK:

Paul Helenberg, Mayor

Attest:

Carie Cuttonaro, City Clerk

Approved as to Form:

Nikki Thompson, City Attorney

Date of Publication: _____

Effective Date: _____

City of Castle Rock

Agenda Item Summary

Item Title

Root cutting and treatment

Recommended Action

Recommend approval

City Attorney Review

Not required

Summary Statement

Public Works requests approval to have sewer root cutting done on approximately 12 sewer main sections by change order on the storm cleaning and inspection project. The price of root cutting is anticipated to be \$35,000. Also requested to spend approximately an additional \$15,000 to complete sewer root treatment to reduce and prolong root growth in sewer main trouble areas for a total of \$50,000.

Staff Contact

David Vorse, Public Works.

Attachments

1. See attached map of mains to be treated

