

Kara Borden
Frank Wilson
U.S. Department of the Interior
Office of the Regional Solicitor
Pacific Northwest Region
601 SW 2nd Avenue, Suite 1950
Portland, OR 97204
kara.borden@sol.doi.gov
frank.wilson@sol.doi.gov

**OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE STATE OF OREGON**

U.S. FISH AND WILDLIFE SERVICE,	)	OAH No. 2022-ABC-05176
Appellant	)	
v.	)	
	)	NOTICE OF APPEARANCE,
STATE OF OREGON DEPARTMENT	)	RATIFICATION OF REQUEST, AND
OF STATE LANDS,	)	CLARIFICATION OF ISSUES
Respondent.	)	
	)	
	)	

The United States Fish and Wildlife Service (USFWS) filed a timely request for a contested case hearing regarding a permit decision by the Department of State Lands (DSL) for Removal-Fill Permit Application 59643-RP, Tonquin Holdings, LLC. Frank Wilson and Kara Borden, attorneys for the USFWS, hereby make an appearance in this matter. Service of documents can be made to:

Kara Borden
U.S. Department of the Interior
Office of the Regional Solicitor
601 SW 2nd Avenue, Suite 1950
Portland, OR 97204
(503) 231-2136
(503) 231-2166 (fax)
kara.borden@sol.doi.gov

Frank Wilson
U.S. Department of the Interior
Office of the Regional Solicitor
601 SW 2nd Avenue, Suite 1950
Portland, OR 97204
(503) 231-2132
(503) 231-2166 (fax)
frank.wilson@sol.doi.gov

Pursuant to OAR 137-003-0550(4), the undersigned hereby ratifies the request for contested case hearing that was filed by USFWS on February 4, 2022. As allowed by Department of State Lands Administrative Rules, attached to this *Notice* is additional information and clarification of the issues. OAR 141-085-0575(4).

Respectfully submitted this 1st day of March, 2022.

A handwritten signature in blue ink, appearing to read 'Frank Wilson', is written over a horizontal line.

Frank Wilson
Attorney for U.S. Fish and Wildlife Service

CERTIFICATE OF SERVICE

I hereby certify that on this 1st day of March, the *Notice of Appearance, Ratification of Request, and Clarification of Issues* was filed via U.S. Mail and facsimile:

Office of Administrative Hearings
P.O. Box 14020
Salem, OR 97309-4020
(fax) 503-947-1923

Per agreement regarding electronic service, the *Notice* was served on the following via email:

Christopher Castelli
Department of State Lands
775 Summer St. NE, Suite 100
Salem, OR 97301
chris.castelli@dsl.oregon.gov

Jesse D. Ratcliffe, Assistant Attorney General
Attorney General's Office
1162 Court St. NE
Salem, OR 97301
jesse.d.ratcliffe@state.or.us

Tonquin Holdings, LLC
Attn: John Schmidt
17933 NW Evergreen Pkwy, Suite 300
Beaverton, OR 97006
john.schmidt@metlandgroup.com

Steve Pfeiffer
Perkins Coie, LLP
1120 NW Couch St., Tenth Floor
Portland, OR 97209
spfeiffer@perkinscoie.com



Frank Wilson, Assistant Regional Solicitor
Office of the Regional Solicitor

ATTACHMENT—ADDITIONAL INFORMATION AND CLARIFICATION OF ISSUES

The Tualatin River National Wildlife Refuge (Refuge) is managed by the U.S. Fish and Wildlife Service (Service) for a variety of wildlife purposes. The Applicant and the Tualatin River National Wildlife Refuge (Refuge) share a unique perched wetland, or kolk pond, referred to as Wetland B in the application, which extends on to both our properties. The proposed quarry sits in a "kolk" or depression in the bedrock scoured out by the prehistoric Glacial Lake Missoula Floods. These rare geologic features, in an area known as the Tonquin Geologic Area, have now developed into unique wetlands associated with rare plant communities. This wetland type still exists and functions at the landscape level, however, these sites are limited and are becoming rare in the region. This distinct feature has been identified by the Oregon Department of Fish and Wildlife as a regionally unique landscape with rare plant communities. Wetland B is located partially within the Rock Creek Unit of the Refuge. The Refuge portion of the wetland is dominated by ash and willow, with a slough sedge herbaceous understory, and the uplands immediately adjacent support a high-density Douglas fir, and secondarily, big-leaved maple, ash, madrone, and oak trees. The site's unique hydrologic and vegetative features are capable of supporting rare plants and animals such as red-legged frogs and western pond turtles, both state-sensitive species. Refuge monitoring has documented breeding red-legged frogs and Neotropical migrants such as willow and olive-sided flycatcher, both state sensitive species.

For more than a decade, the Service has been communicating with the Department of State Lands (DSL), the Applicant, and numerous conservation partners regarding the permanent damage to the Refuge that would result from DSL approval of the application from Tonquin Holdings LLC for a quarry adjacent to the Refuge's Rock Creek Unit. The Service has been involved with reviewing and questioning the Tonquin Holdings LLC quarry permit application since at least 2012, through several application withdrawals and re-zoning by the county. When the application was first proposed in 2013, the Refuge coordinated several meetings and attended several county hearings with the Clackamas Planning Commission and the Clackamas County Commissioners involved in this permit to seek a common understanding of the issues and, if possible, to find a common response. The Refuge also met with the Applicant to discuss the permit. More recently the Service has remained consistently involved in commenting on permit application drafts and requesting clarification and responses from the Applicant. The Service's Oregon Fish and Wildlife Office and Water Resources Branch have reviewed and provided extensive expert comments on the application.

Following multiple reviews and comment letters, the Service maintains that the proposed quarry would have direct and substantial adverse impacts by fundamentally and permanently altering the hydrological function of wetlands within the Refuge through severely disrupting the hydrology supporting the wetlands. We have concerns regarding the long-term viability and protection of Wetland B, Rock Creek, and the other wetlands during the proposed quarry operations and, once they cease, the reclamation phase. Numerous questions and concerns regarding impacts and likelihood of success of restoration remain unanswered by the Applicant.

Specifically, we are appealing the following findings of fact and conclusion of law as articulated in sections II and III of the permitting decision. The permit's finding of fact or conclusion of law is reproduced in quotes, followed by the Service's objections.

Finding of Fact 4: “Applicant provided satisfactory response to comments on November 26, 2019.”

The Service conducted a thorough review of the October 22, 2019, Response to Comments from Tonquin Quarry for Joint Permit Application (JPA) 59643-RP (the Tonquin Quarry Project). The Service still contends the proposed quarry will have direct and long-term impacts by altering the hydrological functions of wetlands within the Refuge. Our concern is with the long-term viability and protection of Wetland B during the proposed quarry operations, the reclamation phase, and after reclamation. The Applicant has not provided satisfactory response to many comments provided by the Service.

Many questions remain unsatisfactorily answered concerning the shallow subsurface hydrology and the water replenishment system for Wetland B. In the 2019 Revised Application and again in the Oct 22, 2019, Response to Comments, it is stated that “in March of 2018, Terra Science, Inc., installed 7 observation tubes (monitoring points) in wetland areas on site, each with a fully encapsulated datalogger that is currently recording water levels every 12 hours.”

As noted in our earlier comments, the Service contends these data are very important for understanding the shallow subsurface flow system in the area of Wetland B and the Refuge. We requested that data from these shallow wells, and any interpretation of the data, be shared with us. We have raised concerns about the conceptual model of hydrology as it relates to Wetland B and have stated repeatedly that the subsurface hydrology needs to be better understood before the proposed quarry would be developed. These questions have not been answered, and the data and interpretations have not been shared.

Regarding the water replenishment system, we would like to know the exact location and extent of the replenishment system relative to the watershed boundary. The Service would like to see the watershed boundaries of all wetlands delineated on the imagery, including the portions of the watersheds not on the private property. The application map currently notes only the portion of Wetland B located in the proposed quarry area. The portions of the watersheds to be affected or removed, as well as the water replenishment system, should be delineated on the imagery as well. To our knowledge, this has not been presented anywhere to date.

The application also does not specify the distance the infiltration trenches and perforated piping will extend. The Service contends that it must be extended across the entire boundary between the wetland and the proposed excavation area. Because the runoff and subsurface flow are currently reaching the wetland throughout this entire distance, the replenishment system would need to replicate what is functioning there now.

The Service has not received a satisfactory response regarding the timeline of development and reclamation in relation to the water needs of Wetland B; specifically, the exact timeline of its construction/implementation. It appears that the area must first be excavated to 100 ft., before the infiltration pond is constructed, since the floor of that pond will be 100 ft., following that, the replenishment system and the clay barrier would be constructed. It is unclear how much time is required for each of these steps and when they will occur relative to each other. The application states that there will be construction periods when (1) the pit is being excavated, or (2) the infiltration pond is being constructed and the clay barrier is placed, that will prevent flow from reaching the wetland. It is unclear how long Wetland B will be without water and, without water, how long the vegetation will survive.

These concerns have been raised in previous comment letters and the Applicant has not provided responses.

The application also does not answer the question of whether the quantity and duration of water provided to Wetland B will be reported as part of the monitoring, and how it will be monitored. The application also does not specify how long the long-term health of Wetland B will be measured and assessed. As indicated on Page 6 of the JPA, the Applicant would provide a financial guarantee of \$81,068.61 to be used in the event there is any reduction of wetland acreage from either Wetland B or C. It is unclear how a “reduction of wetland acreage” would be determined. The Applicant has not provided a response to this question.

On page 5 of Part 2 of the Oct 22, 2019, Response to Comments, the Applicant makes the statement: “If adverse impacts to the adjacent wetlands begin to be observed in the monitoring data during reservoir excavation, appropriate mitigation measures would be developed and implemented.” How will “adverse impacts to wetlands” be determined? What specific “appropriate mitigation measures” would be developed and implemented? These questions have not been answered in the application.

The Service has also asked if there will be a period during reclamation when the replenishment system is not functioning; how long that would last, and how would water be provided to Wetland B during this period. The Applicant has not provided responses to these questions. Is it assumed that the excavated area closest to Wetland B and C will be fully reclaimed, with the clay barrier removed, and that this area will provide inflow to these wetlands before the reclamation begins in the south and east end of the pit? How will the Applicant assure that there are buried impermeable layers in the reclaimed area that replicate the natural basalt layers that exist now and direct infiltration and subsurface flow horizontally toward the wetlands? The Applicant has not provided satisfactory responses to these comments.

Regarding the replenishment system design, the Applicant’s statement on page 4 of the application that “this design is extremely common for septic systems and dry well systems” does not constitute proof of concept for maintaining a perched wetland of such complexity at its pre-disturbance condition. The Applicant has provided no proof of concept for the replenishment system proposed. The 2013 Shannon and Wilson report states on page 201/398 that that geological characteristics of the site **may** be suitable for the proposed infiltration trenches which form the basis for the replenishment system. Is there a local example of another similar water replenishment system that has been successfully used to maintain a complex wetland? The Service questions the long-term feasibility and reliability of this proposed system. What happens if the system fails to sustain the wetland? Are there specific alternative mitigation measures planned or identified? The Applicant has not provided satisfactory responses to any of these significant concerns.

There is a discrepancy in the proposed inflow rates for the wetlands. On pg. 88/138 of Part 2 of the Response to Comments, there is a statement from the 2013 Hearing that says: “Based upon its modeling, Westlake concluded that the Project would need to pump 0.1 cfs water on a continuous basis from November to May to provide the water volume lost by removing the watershed upgradient of the impacted Wetlands B and C.” But in the Revised Application from Apr 2019, the table on pg. 392/398 provides estimated flow rates for Wetlands B and C based on the Rational Method and these sum to <0.01 cfs. Is the flow rate 0.1 cfs or <0.01 cfs? The latter flow rate does not seem adequate. The

maximum monthly flow rate for Wetland B on pg. 392/398 of the 2019 Revised Application is 4.09 gallons per minute. This is not even the average flow from a garden hose. The Applicant has not provided a response to this question nor clarified the estimated flow rate.

We contend that the method on pg. 392/398 used to estimate water requirements for Wetland B and C (the Rational Method to estimate peak discharge from a storm event) is inappropriately applied here. For example, hourly precipitation intensity was estimated by averaging monthly precipitation data, meaning it is much lower than it should be. Furthermore, the method only quantifies surface runoff from a storm event, which ignores the fact that most of the water reaching Wetland B is subsurface flow. This is affirmed by numerous statements in the Response to Comments and the 2013 Shannon and Wilson report. This is likely why the estimate on pg. 392/398 using the Rational Method is so low. The Applicant has not provided a satisfactory response to this comment.

Data from a U.S. Geological Survey study in the Chehalis River Basin estimated that 30% of the annual precipitation was recharged to groundwater and another 30% was surface runoff (USGS, SRI 2018-5084). Applying these numbers to the annual precipitation and percent of watershed removed for Wetland B provides about four times as much flow as the quantity on pg. 392/398. The Service contends that is a more appropriate means of estimating water requirements for Wetland B, which likely requires much more water than is estimated on pg. 392/398. The replenishment system should be designed to accommodate much more inflow.

Finally, as stated above, the Service's comment letters have repeatedly requested shallow well data from the Applicant to better understand the shallow subsurface hydrology. In both comment letters, we raised concerns about the conceptual model of hydrology as it relates to Wetland B and stated that the subsurface flow system needs to be understood better before the proposed quarry project begins. Shallow well data would be very helpful in developing such an understanding. In our most recent (May 31, 2019) letter, we also requested more detail on the water replenishment system; the infiltration trenches and perforated piping; the proposed wetland inflow rate; and the exact timeline of quarry excavation/reclamation, infiltration pond construction, and clay barrier construction. It is very concerning that the Applicant has not responded to these information requests. Rather than provide supporting data or information in response to these requests, they continue to push a simplified conceptual model of the subsurface system in their financial assurance offer.

Finding of Fact 5.a: "The project described in the permit application and as conditioned in the permit, is consistent with the protection, conservation, and best use of the water resources of this state as specified in ORS 196.600 to 196.905." As discussed below, Findings of Fact 5.a.ii and 5.a.iii are incorrect. Because those predicate findings are incorrect, DSL's conclusion here is accordingly unsupportable.

Finding of Fact 5.a.ii. "The applicant is constructing a system to capture and release surface and rain water to ensure the preservation of the undisturbed hydrology (volume and timing) to the indirectly impacted offsite wetlands."

The proposed project and water replenishment system clearly involves modification of subsurface hydrology from the undisturbed state. The statement in Finding of Fact 5.a.ii. is incorrect because it does

not acknowledge influence of the replenishment system on subsurface water flux between the project area and offsite wetlands.

We have repeatedly raised concerns about the conceptual model of hydrology as it relates to Wetland B and have stated that the subsurface hydrology needs to be better understood. To this end, we have requested the continuous water level data from the observation tubes reportedly installed by the applicant in 2018. However, no data has been shared with us to date. This would be extremely useful in assessing seasonal water level fluctuations, hydraulic gradients, and flow direction (see the comment below on inconsistencies in flow direction in the application). We assume that runoff and subsurface flow are currently reaching the wetland over the entire boundary between the wetland and the proposed excavation area, meaning the replenishment system would need to extend this entire length to replicate what is functioning there now. However, no information is provided on the length or extent of the replenishment system. In previous comments, we have noted a discrepancy in the estimated flow rates to be provided to Wetland B by the replenishment system (from 0.1 cfs in 2013 to <0.01 cfs in 2019). The smaller inflow rate seems inadequate, but we have received no further justification of this rate. We also requested information on the timing of quarry construction, development and reclamation, with respect to installation/removal of the clay barrier, installation of the infiltration pond and operation/termination of the water replenishment system. As discussed above, it seems that there will potentially be long periods of time when the water supply to Wetland B will be interrupted. This could be very detrimental to the ecology of the wetland.

We contend that Applicant has not demonstrated that the proposed project will ensure preservation of the undisturbed hydrology (volume and timing) to offsite wetlands because it is not possible for Rock Creek to be restored to an undisturbed hydrology with the proposed project in place. We also contend that the Applicant has not demonstrated that the proposed project will not result in contamination of wetlands that could “disturb” wetland ecological function.

The project has the potential to prevent the success of future restoration of Rock Creek. While Rock Creek is not currently a natural system downstream from the proposed quarry due to historic modification, it does have the potential to be restored in the future. The quarry will create a very deep pit in the upper end of the Rock Creek watershed. The proposed project would prevent successful fulfillment of restoration of Rock Creek and associated wetlands to an undisturbed state as stated in the permit conditions.

The project has the potential to contaminate Refuge wetlands and Rock Creek, but these issues are not addressed in the proposed project permit. Because a majority of the proposed project is within the Rock Creek watershed, there could be contamination from quarry materials that could be transported to Rock Creek through the subsurface or surface. Furthermore, the project will involve the mixing of groundwater from four different aquifers that will be pumped into the wetland, and there is uncertainty as to the resulting geochemistry and water quality of such mixing that pose an unknown impact from contamination on wetland ecological function. There is a potential for a contaminant transport pathway between connected wetlands, Rock Creek, and other wetlands within the Refuge because Rock Creek is occasionally used to support seasonal wetlands including those at the Onion Flats unit. The Applicant’s claims to be able to mitigate for water quantity and quality impacts are based on untested and novel measures.

Finding of Fact 5.a.iii: “The applicant will place only clean fill in the quarry pit when mining activity has ceased to restore the terrain of the watershed within the mined areas and restore the hydrology (volume and timing) to wetlands B, C and Rock Creek back to predisturbance conditions.”

The application is severely lacking with respect to a long-term plan for the protection of the wetlands on the Refuge following completion of the quarry project. The reports states that at the conclusion of the quarry operations (approximately 20 years), the pit would be reclaimed by compacting material into a dense subsurface layer sloping toward the wetlands. The slopes would be equal to the pre-mining condition. However, most of the inflow to the wetland is shallow groundwater, not surface water runoff. Without the original basalt’s impermeable layers and inflow zone in the area upgradient or upslope of the wetland, groundwater may not flow into the wetlands, especially if this material is compacted as indicated. This compacted material is not likely to be permeable and presumably, the water replenishment system will not be operating anymore once the quarry operation ceases. This will severely constrain subsurface inflow to the wetland.

We have additional questions specifically regarding fill material. Is the native soil/bedrock going to be used throughout the trench to bedrock or just a portion of the vertical extent? (The text on pg. 4 calls the upper 2-3 ft to be backfill of salvaged material, not the clay/soil mixture – why won’t the clay barrier extend vertically all the way to bedrock or impermeable clay? If it doesn’t, it won’t be effective). Will this be under the road or adjacent to it – is it practical to have a shrinking and expanding clay as a base for a roadbed? How will it be determined (and monitored) that clay or bedrock is reached with the barrier?

Table 2 in the Shannon and Wilson report from 2013 (pg. 223/398) shows groundwater levels and estimated flow directions in the three monitoring wells. Data from the wells are presented from 2010 to 2013 and in all of the measurements, the groundwater flow is estimated to be southwest. But the text in the application implies that water supporting Wetland B (surface and shallow groundwater) is flowing north from the proposed excavation area to the wetland. Is this based on surface topography or on shallow water level data from the observation tubes? There needs to be confirmation that shallow groundwater is flowing in this direction. Otherwise, the proposed water replenishment system may fail since the infiltrated water would not flow in the direction of the wetland. Data from the shallow monitoring wells installed in March 2018, mentioned above, would help assess this.

In addition, no mention was made of the clay barrier that was installed to prevent groundwater from moving from the wetlands into the pit. After completion of the quarry and backfilling of the pit, this clay barrier will act to prevent groundwater from moving from the area of the reclaimed pit to the wetlands. This clay barrier must be removed and the ditch restored after the quarry operations are finished, otherwise it will prevent groundwater inflow from reaching the wetlands on the Refuge.

The permit and conditions do not demonstrate that the Applicant will be able to assure removal of the clay barrier and replacement of the buried impermeable layers and interflow zones in the reclaimed area in a manner to sufficiently replicate natural basalt layers that currently exist. These layers and interflow zones currently direct infiltration and subsurface flow horizontally towards the wetlands.

Finding of Fact 6.c.iii: “Alternative 3, the Preferred alternative, proposes direct impacts only to Wetland A (1.01 acres). Wetlands B, C and D (Rock Creek) would be avoided directly, although there

will be indirect impacts to Wetlands B, C and Rock Creek. The direct impacts are to be mitigated through the purchase of Mitigation Bank Credits. The indirect impacts are to be prevented through the continuation of groundwater hydrology to these offsite wetlands during operation and restoration of the watershed elevations and slopes upon completion of mining operations.”

See comments below regarding Finding of Fact 6.f.

Finding of Fact 6.f: “There is a conflict with existing public uses of the affected waters or adjacent land uses identified in the application evaluation and public review processes. The mining operation directly impacts Wetland A through the complete removal of the soil and underlying rock at the location of Wetland A. The mining operations may also indirectly impact offsite wetlands and waters by a change in hydrology patterns due to the alteration of the terrain within the watersheds that drain to the offsite waters. Impacts to Wetland A, by themselves, will not affect the offsite waters of the state. To remove this conflict, the applicant will maintain the hydrology (volume and timing) to the offsite wetlands through a system designed to capture and release water to those wetlands and waters at the pre-mining rate and time. Upon completion of mining activity, the applicant will restore the terrain of the mined area (not to the pre-mining elevation) to re-establish the natural flow of surface and ground water to those features. In order to achieve restoration of the site after mining has been completed, the Department has required a bond that is phased with the mining phases and increases with the Consumer Price Index. The State of Oregon, through the Department of State Lands, can declare the permittee in default if the permittee does not reclaim the terrain of the mined area and restore the hydrology to the offsite wetlands at the completion of mining. This would result in the State calling on the surety to meet the permittee's obligations under the bond.”

Regarding the Financial Guarantee for the Tonquin Quarry Project, this does not address the Service’s questions and concerns about the long-term viability and protection of Wetland B during the proposed quarry operations, the reclamation phase, and beyond. The Service outlined these questions and concerns in our May 2019 and January 2020 letters and we have yet to receive a response. With this offer of financial assurance, the Applicant seems to be conceding that the proposed mitigation for Wetland B, including the clay barrier, the water replenishment system, the monitoring of wetland impacts, and reclamation of the natural subsurface hydrology may not be reliable or feasible in the long-term, thus validating our concerns. Rather than responding to the Service’s comments in the letters, the Applicant has proposed to buy a portion of another wetland to substitute for the loss of wetland on the Refuge. This is very concerning to us as it is unprecedented and appears to suggest that there may not be satisfactory answers to the issues we raised in our letters.

The Service is concerned that the financial assurance offer seems to imply the Applicant can abandon mitigation of Wetland B at any time if it fails or proves to be impractical or too costly. These are exactly our concerns with the mitigation plan as it has been conceptualized. The financial assurance offer does not and cannot ensure on-site, in-kind, mitigation, meaning this unique wetland system cannot be preserved or replaced.

Conclusions of Law: “Based on the factors laid out in ORS Chapter 196 and OAR Chapter 141, Division 85, including ORS 196.825, OAR 141-085-0565, and OAR 141-093-0115, DSL should

approve the permit application as conditioned in the proposed permit.” To the extent DSL’s summary conclusion is based on any of the Findings of Facts discussed above, it is factually unsupported.

In summary, there are many details in this application that have not been adequately addressed or explained. The Service has requested but not received an example of a similar water replenishment system for a wetland that demonstrates the long-term viability and success of such a system. Simply put, the proposed mitigation plan for Wetland B appears to be unprecedented. Without further information and responses to our questions and concerns, we cannot condone an offer that may allow unmitigated impacts to the wetland.

Quarry excavation of the contributing watershed for Wetland B will directly affect the hydrology, ecology, and biological integrity of this unique wetland on the Refuge. Approval of this proposal and permit would establish a precedent that any activity or action can be permitted to impact wetlands on Congressionally authorized National Wildlife Refuges and Service trust resources as long as off-site, out-of-kind mitigation can be accomplished somewhere else.