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No. 25161-6-III

(Douglas County Superior Court No. 05-2-00235-0)

IN THE COURT OF APPEALS, DIVISION III
STATE OF WASHINGTON

DON L. FITZPATRICK and PAM FITZPATRICK, husband and wife;
BRAD STURGILL and HEATHER FITZPATRICK STURGILL,
husband and wife,

Appellants.

vs.

OKANOGAN COUNTY; THE STATE OF WASHINGTON; JOHN L.
HAYES and JANE DOE HAYES, husband and wife; and METHOW
INSTITUTE FOUNDATION,

Respondents,

APPELLANTS' OPENING BRIEF

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ORIGINAL

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INTRODUCTION

This case is before the Court of Appeals on a grant of summary judgment to Defendants, the State of Washington and Okanogan County. As will be shown below, highly qualified expert testimony clearly established the factual basis for liability. Moreover, this evidence shows that the defense based on the “common enemy doctrine” is not applicable. This Court should reverse summary judgment and remand for trial.

The uncontested evidence below is that the cause of Plaintiffs’ loss (destruction of their home and land) was due to a dike completed as a public project along the Methow River. Defendants moved for summary judgment arguing that even though the dike caused the damage, the common enemy doctrine precluded liability because the dike merely repelled surface waters. Plaintiffs responded with expert testimony showing that the dike did not repel surface waters but, in fact, blocked the flow of natural side channels and drainways. Plaintiffs rely on Washington State Supreme Court decisions that unequivocally hold that the common enemy defense is not available to a party that blocks the flow of a watercourse or natural waterway. *Currens v. Sleek*, 138 Wn.2d 858, 862 (1999).

Defendants offered no expert testimony or evidence to contradict Plaintiffs’ expert. At the very least, Plaintiffs presented evidence more

than sufficient to establish a genuine issue of material fact regarding the applicability of the common enemy defense. Nevertheless, the trial court granted summary judgment and denied Plaintiffs' Motion for Reconsideration. This is contrary to law and should be reversed by this Court to avoid a manifest injustice.

ASSIGNMENTS OF ERROR

- A. The trial court erred when it entered its Order dated March 7, 2006, granting the State and Okanogan County summary judgment. CP 277-278.
- B. The trial court erred when it entered its Order denying Plaintiffs' Motion for Reconsideration dated April 13, 2006. CP 281-282.

ISSUES RELATING TO ASSIGNMENTS OF ERROR

1. Whether Plaintiffs presented genuine issues of material fact that a public project caused the damage to Plaintiffs' property?
2. Whether the common enemy doctrine is available as a defense to a party that undisputedly blocked a natural watercourse?
3. Whether the common enemy doctrine applies to both downstream and upstream property owners?
4. Whether Plaintiffs met the requirement of standing for asserting an inverse condemnation claim since they were the owners of the property at the time of the property damage?
5. Whether the Government can be absolved from liability under Wash. Const. Art I, § 16 by arguing that it did not intend to damage private property?

6. Whether tort immunity statutes can preclude constitutional causes of action?

STATEMENT OF THE CASE

Plaintiffs are the owners of real property located along the Methow River in Mazama, Washington. CP 2; CP 163. The property was first acquired by Plaintiffs, Heather Fitzpatrick Sturgill and Don L. Fitzpatrick, in the early 1980s. CP 164. The property was developed with a log house and garage in the mid 1980s.¹ CP 165-166.

Prior to June 16, 2002, the channel alignment of the Methow River was generally southwest and away from Plaintiffs' property. CP 3. Before the June 16, 2002 event, Plaintiffs' house was situated approximately 80 to 100 feet from the Methow River. CP 3. This location was outside of the 100 year flood line.² CP 167.

On or around June 16, 2002, the river changed course and avulsed. CP 3. An avulsion is when a channel changes course very quickly and results in a completely new channel alignment separate from the previous channel alignment.

The change in channel alignment that occurred on June 16, 2002, caused a substantial force of water to be redirected and aimed straight at

¹ Heather Fitzpatrick Sturgill and Don L. Fitzpatrick are siblings. CP 162. Heather Fitzpatrick Sturgill is married to Plaintiff Brad Sturgill. CP 161. Don L. Fitzpatrick is married to Pam Fitzpatrick. CP 162.

² Since Plaintiffs' property was not located within a floodplain, Plaintiffs were not able to purchase flood insurance for the property. CP 167.

Plaintiffs' property, thereby resulting in a rapid erosion of the land and ultimately causing Plaintiffs' house to collapse into the river. CP 3; CP 46-48. Plaintiffs' house, its contents, and a significant portion of land, have been permanently destroyed. *Id.* While the garage is still in place, it is now located immediately along the edge of the now existing riverbank. CP 3.

Defendants label the June 16, 2002 event as a "flood" event, but Defendants provided no evidence below to support that characterization. CP 76. In fact, the water flow on June 16, 2002 is more accurately described as a two year storm event. CP 145. There is no evidence of any flooding.

Plaintiffs had not been aware of the presence of a man-made dike upstream from their property until after the June 16, 2002 event. CP 168. Plaintiffs have since learned that sometime around 1975, the County and the State sponsored and constructed a dike, known as the Sloan-Witchert Slough Dike (the dike) along the right bank (looking downstream) of the Methow River at SW ¼ of Section 4, T35N, Range 20 East, W.M. The dike was constructed as a public project for flood protection purposes to protect Washington State Highway 20, the Weeman Bridge, and several private properties. *See* Agreement No. 15-74 dated June 30, 1975, between State and County regarding construction of dike at CP 174. The

dike was subsequently repaired/extended in 1978, 1983, 1987, and 1999.
CP 176-177, CP 179-180; CP 182-184; CP 186-195; CP 197; and CP 199.

Plaintiffs retained Jeff Bradley, Ph.D. of West Consultants to investigate the cause of the avulsive event. CP 158. Dr. Bradley is a nationally recognized expert with over thirty years in managing complex water resource issues. CP 136. Dr. Bradley is a registered engineer and has a Ph.D. in Civil Engineering – Hydraulics. CP 132. His curriculum vitae can be located at CP 136-142, which includes his current service as President of the American Academy of Water Resources Engineers and Past President of the American Society of Civil Engineers Environmental and Water Resources Institute.

As part of his investigation, Dr. Bradley conducted a site visit of Plaintiffs' property and the surrounding area. CP 132. Dr. Bradley also acquired peak streamflow data and reviewed aerial photographs of the project area to analyze the historical meander patterns and to analyze the amount of side channel blockage from the construction of dikes on the right bank. CP 132. Dr. Bradley concluded that by blocking several natural side channels, the dike caused the avulsive event that damaged Plaintiffs' property. CP 133.

Plaintiffs brought an inverse condemnation claim against the State of Washington (State) and Okanogan County (County) for the avulsive

event. CP 2; CP 4.³ Defendants each separately moved for summary judgment to dismiss Plaintiffs' claims. CP 18-27; CP 75-87. Plaintiffs responded that summary judgment was not appropriate since there were genuine issues of material fact as established by the evidence presented and the Declaration submitted by Plaintiffs' expert, Dr. Jeffrey Bradley.⁴ CP 110-130. The trial court granted summary judgment to each of the Defendants. CP 232-234.

Plaintiffs sought reconsideration of the Court's dismissal of their inverse condemnation claim against Okanogan County and the State of Washington. CP 235-250. Plaintiffs did not seek reconsideration regarding dismissal of Plaintiffs' tort claims against Defendants Hayes and MIF.⁵ *Id.* Plaintiffs timely filed a Notice of Appeal to this Court.

³ In the alternative to their inverse condemnation claim, Plaintiffs also pled a trespass claim, a negligence claim, and a claim under the waste statute (RCW 4.24.630) against the State and County. CP 4-5. Plaintiffs also included a trespass claim, a negligence claim, and a claim under the waste statute (RCW 4.24.630) against John and Rayma Hayes (Hayes) and the Methow Institute Foundation (MIF). *Id.*

⁴ Concurrently with the filing of Plaintiffs' Opposition to Defendants' Motions for Summary Judgment, Plaintiffs also filed a motion for continuance of the summary judgment under CR 56(f) arguing that a continuance should be granted so that Plaintiffs could conduct further discovery which was denied by the trial court. CP 11. Plaintiffs did not appeal this order. CP 274-282.

⁵ When Plaintiffs filed this lawsuit, Hayes and MIF were included as defendants because several sources of evidence indicated ownership and/or involvement in the dike and its maintenance by Hayes and MIF. However, since the original filing, Plaintiffs have assembled evidence that the dike was a public project and caused the avulsion by blocking off natural, side channels, thereby causing a taking. Plaintiffs' appeal is not challenging the trial court's grant of summary judgment to Hayes and MIF.

STANDARD OF REVIEW

Summary judgment is appropriate when there are no genuine issues of material fact and the moving party is entitled to judgment as a matter of law. *Marquis v. City of Spokane*, 130 Wn.2d 97, 104-05 (1996). A motion for summary judgment accepts all facts and reasonable inferences in the light most favorable to the nonmoving party. *Owen v. Burlington Northern and Santa Fe Railroad Co.*, 153 Wn.2d 780, 787 (2005). Appellate courts review a denial of a summary judgment motion *de novo*. *Id.* at 787.

ARGUMENT

SUMMARY JUDGMENT ON PLAINTIFFS' INVERSE CONDEMNATION CLAIM WAS REVERSIBLE ERROR

Defendant County and State moved for summary judgment arguing that they were protected from liability by the common enemy doctrine, tort immunity, and Plaintiffs' failure to establish the essential elements of their liability claims. CP 18; CP 75. Since the trial court's order granting Defendants summary judgment does not state the reasons for granting summary judgment and since review by this Court is *de novo*, Plaintiffs will address each argument made by the County and State below. CP 277-279.

A. Plaintiffs' Evidence Established the Elements of an Inverse Condemnation Claim.

Defendant County and State argued in their summary judgment motions that Plaintiffs had failed to establish the essential elements to support their inverse condemnation claim against Defendants. CP 18; CP 75. However, Plaintiffs' evidence is uncontested and clearly meets the requirements for an inverse condemnation claim.

An action for the government's taking or damaging of land is grounded in the Washington State Constitution, which provides: "No private property shall be taken or damaged for public...use without just compensation having been first made." In order to maintain an inverse condemnation claim, a party must establish the following elements (1) a taking or damaging (2) without just compensation (3) of private property (4) for public use (5) by a governmental entity that has not instituted formal proceedings. *Phillips v. King County*, 136 Wn.2d 946, 957 (1998). Each of these elements is established by uncontroverted evidence.

First, an inverse condemnation claim for compensation is properly made where it is shown that a **public project** caused the destruction of private property. *Boitano v. Snohomish County*, 11 Wn.2d 664 (1941) (damage caused to adjoining property by government's operation of a gravel pit held to be a public use). A typical example is *Ulery v. Kitsap*

County, 188 Wash. 519, 522 (1936) where the plaintiff brought suit to recover compensation for damages by waters deposited upon his land caused by a newly constructed highway. In upholding the claim for compensation, the Court held:

The construction of highways by a county is lawful, but a county has no right to construct a highway to the damage of a private citizen of the county and any use of land for a public purpose which inflicts an injury upon adjacent land, such as would have been actionable by a private owner, is a taking and damaging within the Constitution ...

Id. at 524.

Here, Plaintiffs established below, and it was not disputed, that they are the owners of private property that has been destroyed. This was made clear by the deposition testimony of Brad Sturgill where he describes the destruction of the home through its collapse in the river and the complete elimination of a substantial portion of the land. CP 169-172.

The evidence was also undisputed that the dike was a public project completed by the State and County. *See* Agreements executed by State and County and permit forms at CP 174-199.

Indeed, the County confirmed this evidence. The Declaration of David Schultz, former Okanogan County Commissioner, states at CP 93-94:

The dike had been **constructed** or improved in the mid-1970s **by** Okanogan County and the State of Washington, to protect nearby properties, including Highway 20, from flood damage in high water events.

The evidence below also established that the location of the public project caused the avulsion event which destroyed Plaintiffs' property. Dr. Bradley conducted a site visit of Plaintiffs' property on August 24, 2004. *See* Bradley Decl. at CP 132. The site visit included an airplane fly over of the Methow River at the location of the 2002 avulsion and the surrounding reach, a ground level investigation of the avulsion site, inspection along the dike, and inspection of Plaintiffs' property. *Id.* Dr. Bradley also acquired peak streamflow data from the United States Geological Survey (USGS) at four gages on the Methow River and performed flood frequency analysis of the gage data using the computer program HEC-FFA. *Id.* In addition, Dr. Bradley reviewed aerial photographs of the project area to analyze the historical meander patterns and to analyze the amount of side channel blockage from the construction of dikes on the right bank. *Id.*

Dr. Bradley concluded that the location of the dike blocked water in the high flow event from accessing and releasing through the natural defined side channels of the Methow River. Bradley Decl. at 3 ¶7 at CP 133 (a copy of Dr. Bradley's Declaration and exhibits is attached to this

brief for the Court's convenience). Allowing access to the side channels would have reduced the energy, velocity, flow and erosive power of the main channel. Bradley Decl. at 3 ¶6 at CP 132-133. Dr. Bradley's testimony concludes:

By allowing the river to access these natural side channels, it would have been able to meander more naturally and the avulsion that occurred in 2002 would not have occurred.

Bradley Decl. at 3 ¶8 at CP 133. Accordingly, the undisputed evidence, establishes the causation between the dike and the destruction of Plaintiffs' property.

Finally, the destruction of Plaintiffs' property as a result of the public project has not been accompanied with payment of just compensation. That is the reason this lawsuit has been filed. Accordingly, Plaintiffs met their burden of providing evidence to meet the elements for establishing their inverse condemnation claim.

B. There Were Genuine Issues of Material Fact Regarding the Common Enemy Doctrine Rendering Summary Judgment Improper.

The apparent basis for granting summary judgment was that the common enemy doctrine provided a defense to the inverse condemnation claim. This is the key issue in this appeal.

1. Legal Background on the Common Enemy Defense

First, a brief background on the common enemy doctrine is warranted. The doctrine has its Washington roots in *Cass v. Dicks*, 14 Wash. 75 (1896). The Court there explained that “**surface water**” is regarded “as an outlaw and a common enemy, against which anyone may defend himself, even though by so doing injury may result to others.” *Id.* at 78 (emphasis added). Significantly, the Court explained that the defense only applied when blocking *surface waters*, as distinguished from *riparian waters* flowing within a natural stream.

The water which passes from the premises of appellants does not flow in a defined channel having a bed and banks, and, consequently, is to all intents and purposes surface water and the rights of the respective parties in regard thereto must be determined by the law relating solely to surface water ...

Id. at 77-78. The Court continued to set forth the general rule:

If one in the lawful exercise of the right to control, manage, or improve his own land, finds it necessary to protect it from surface water flowing from higher land, he may do so: and if damage thereby results to another, it is *damnum absque injuria*.

Id. at 78.

The leading Washington case discussing whether the law of surface waters applies, or the law governing riparian waters, is *Sund v. Keating*, 43 Wn.2d 36 (1953). The Court there acknowledged the general

proposition that waters overflowing from a river in flood time **may** often be surface waters. *Id.* at 41. However, the Court clarified that this is not always the case. Indeed, with respect to *Cass v. Dicks*, the Court explained:

Because the flood waters involved in the *Cass* case were not confined within the channel of a natural watercourse, we assumed, without discussion, that the case was governed by the law of surface waters.

Id. Significantly, the Court went on to explain that its prior cases did **not** hold that flood waters *remaining in a flood channel* of a stream were surface waters.

In none of these cases have we decided whether flood waters, still remaining within the confines of the flood channel of a stream, are an integral part of the watercourse and governed by the laws relating to riparian rights, or whether they are surface waters.

Id. at 42. The Court then followed the “weight of the authority” recognizing that

the law of surface waters is applicable, **once the facts show** that the waters have become ‘diffused surface waters’ as opposed to surface waters flowing within a watercourse.

The logical underpinning for the majority view is that a stream must be viewed as consisting of its normal banks and what is termed its ‘flood channel.’ *So long as the waters remain within this flood channel*, the waters are properly classifiable as **riparian waters**.

Id. at 42-43 (bold and italics added).

In subsequent cases, the Court has referred to blockage of water within a natural watercourse as being an “exception” to the common enemy defense. The “exception” label may not be entirely accurate since such waters are simply not surface waters and therefore not within the scope of the right to defend one’s property from surface waters.

Regardless of the label, the rule is well established.

The first exception [to the common enemy defense] provides that, although landowners may block the flow of diffuse surface water onto their land, they may **not** inhibit the flow of a **watercourse** or **natural drainway**. Under this exception, a landowner who dams up a stream, gully, or drainway will not be shielded from liability under the common enemy doctrine.

Currens v. Sleek, 138 Wn.2d 858, 862 (1999). “A natural drain is that course, formed by nature, which waters naturally and normally follow in draining from higher to lower lands.” *King County v. Boeing Co.*, 62 Wn.2d 545, 550 (1963).

[T]he common enemy doctrine in Washington allows landowners to alter the flow of surface water to the detriment of their neighbors, so long as they do not block a watercourse or natural drainway ... These exceptions to the common enemy doctrine are not unique to Washington, but have been embraced by nearly every jurisdiction where the common enemy doctrine governs drainage liability.

Currens, 138 Wn2d at 862-63.

Defendants relied below upon *Halverson v. Skagit County*, 139 Wn.2d 1 (1999) for their defense that dikes preventing flood waters from leaving the channel of a river do not create liability because of the common enemy doctrine. However, Defendants' reliance on *Halverson* was misplaced. In *Halverson*, there **was no evidence that the dike blocked a natural watercourse**. Indeed, this distinction was specifically noted in footnote 14. "[T]here is no evidence in the record that the overbank floodwaters flowed within a defined flood channel"). *Id.* at 14. Moreover, that same footnote cited with approval *Sund v. Keating* and noted that waters "escaping the banks of a river and flowing *into a defined flood channel* are not surface waters." *Id.* (Italics by the Court).

In short, the defendants in *Halverson* had not inhibited the flow of a natural watercourse or drainway. Accordingly, those defendants could rely upon the common enemy doctrine as a defense. The same cannot be said of Defendants in this case.

Defendants' reliance upon *Halverson* may also be due to an inaccurate jury instruction. The jury instruction stated that a landowner may repel surface water without liability. The jury instruction included a sentence stating as follows:

Once water overtops the banks of the river, it becomes surface water.

Halverson, 139 Wn.2d at 14 (quoting jury instruction). This is *exactly what the Defendants in the present case want this Court to believe*.

However, that part of the jury instruction was **not accurate**. The Washington Supreme Court explained:

The portion of the instruction defining surface waters as *all* overbank waters may have been incomplete. See *Sund v. Keating*, 43 Wash.2d 36, 42-46, 259 P.2d 1113 (1953) (waters escaping the banks of a river and flowing *into a defined flood channel* are **not** surface waters). Nonetheless, any problem with this instruction is of no consequence here because there is **no evidence in the record** that the overbank floodwaters flowed within a defined flood channel. To the contrary, even Plaintiffs' expert testified that, absent these levees, the floodwaters would have diffused over the entire floodplain, escaping into an entirely separate river drainage basin.

Halverson, 139 Wn.2d at 14, n. 14 (italics by the Court; bold added).

The *Halverson* opinion goes on to state:

The chief characteristic of surface water is its inability to maintain its identity and existence as a body of water. It is thus distinguished from water flowing in its natural course ...
Sund held that floodwaters still flowing within a defined "flood channel" cannot be diverted out of the channel without incurring liability for resulting damages, thus, partially limiting those earlier cases which classified *any* floodwaters as surface waters. See *Sund*, 43 Wash.2d at 44-45, 259 P.2d 1113.

Halverson, 139 Wn.2d at 15 (italics by the Court).

Accordingly, *Halverson* embraces and follows the law set forth in *Sund*, and also recited in *Currens*. This is the law that the Court is required to apply to the undisputed facts in this case. When correctly applied to this case, summary judgment must be reversed.

2. The Undisputed Evidence Shows Defendants Blocked a Natural Watercourse

In order for trial Court to grant summary judgment to the Defendants on the basis of the common enemy doctrine, the trial court must have had before it an undisputed fact that the waters blocked by the dike would have been **surface waters**. But there was **no such evidence**. The Defendants cannot point to a shred of evidence that the dike blocked waters on June 16, 2002, that would have become diffused surface waters. To the contrary, the only evidence before the trial court was that the waters held back by the dike were riparian waters that would have otherwise flowed through natural side channels. Granting summary judgment was clearly contrary to law since facts and inferences must be read in light most favorable to the Plaintiffs as the nonmoving party. *Fell v. Spokane Transit Authority*, 128 Wn.2d 618, 625 (1996).

The exceedingly high qualifications of Plaintiffs' expert, Dr. Jeff Bradley, were mentioned before and his Declaration and report are

attached to this brief for the Court's reference. Notably, the Defendants did not question his credentials in any respect.

Dr. Bradley's testimony states in part:

It is my expert opinion that there are several **naturally defined side channels, or watercourses**, in the right floodplain of the Methow River in the vicinity of the dike. These side channels relieve flow from the main channel as the water level rises during a high flow event.

Declaration of Jeffrey B. Bradley at ¶ 6 (emphasis added) at CP 132-133 attached hereto; *see also* aerial photographs of the area designating location of these side channels at CP 151-155 attached hereto.

Dr. Bradley continued:

In this section of the Methow River, it is clear that one by one the side channels in the right floodplain were blocked off with the construction of the dikes beginning in 1975 through the 1999 COE flood fight.

Declaration of Bradley at ¶7 at CP 133.

Dr. Bradley explained that it was the blockage of these side channels that caused the avulsion.

By allowing the river to access these natural side channels, it would have been able to meander more naturally and the **avulsion** that occurred in 2002 **would not have occurred**.

Id. at CP 133 (emphasis added). Dr. Bradley concluded that the blockage of these side channels resulted in Plaintiffs' loss.

The construction of the dikes limited the path the avulsion could take to the one that it took in 2002. All other side channels had been blocked by the dike and in June 2002, the river had only one path to take and that was across the large meander bend which resulted in the loss of the Fitzpatrick property.

Id. at 3 ¶9 at CP 133.

Dr. Bradley did opine that the County and State could have placed the dike in a different location that would not have blocked the side channels. This location is identified as Alignment A on the Bradley report aerial at CP 155, copy attached for the convenience of the Court. Dr. Bradley noted that location would have avoided blocking the natural side channels while protecting the highway from flood waters that exceeded the capacity of the side channels and drainway.

The 2004 photograph in Attachment A (CP 155) includes the location of a proposed set-back levee by the Corps of Engineers in the 1970's with two alignments. This levee was never constructed due to several factors including funding, timing, and acquisition of required property (Reference 15). It is clear from the layout of this proposed levee that it would have allowed the river to access all of the side channels with Alignment A and all but one with Alignment B. By allowing the river to access these natural side channels, it would have been able to meander more naturally and the avulsion that occurred in 2002 would not have occurred.

CP 147. Had Defendants chosen Alignment A for the location of the dike, the side channels would not have been blocked and the common enemy

doctrine might have been available if the dike caused damage by repelling surface waters. Those facts would be analogous to the *Halverson* case. However, those are not the facts presented in this case. Here, the dike cut off the natural side channels and thereby caused the avulsion and resulting damage.

The Defendants offered nothing to rebut Dr. Bradley's conclusion that the blockage of the side channels caused this event. Indeed, his conclusion is corroborated by other evidence. A memorandum dated November 30, 1999, prepared by Al Wald, identified on the document as a hydrogeologist for the Washington State Department of Ecology states:

This road and dike work has impacted the Methow River by **cutting off** at least three **natural overflow channels** in the floodplain, thereby compressing more flood flow into the main channel and reducing the natural flood conveyance capacity of the river. Overall this work has cut off about a mile of overflow channels. Additional velocity and quantities of high flows compressed into the main channel during floods are disrupting the natural bed form of the river and causing additional erosion and scour of the main channel downstream.

CP 254-255 (emphasis added).

Although Dr. Bradley's testimony was more than sufficient, this memorandum is consistent with Dr. Bradley's analysis. Plaintiffs provided factual evidence that the dike blocked natural watercourses and therefore caused the destruction of Plaintiffs' property. The Defendants

offered no contrary evidence and necessarily conceded these facts. Under these circumstances, granting summary judgment based on a defense of the common enemy doctrine was contrary to law.

3. Granting Summary Judgment Was Reversible Error

In addition to the law and evidence presented above, additional case law clearly shows that the grant of summary judgment was reversible error. In *Snohomish County v. Postema*, 95 Wn. App 817 (1998), *review denied*, 139 Wn.2d 1011, an upper landowner, Postema, cleared and graded his land thereby causing damage to a downstream property owner. In responding to the claim for damages, the upper landowner filed a summary judgment motion arguing that he was shielded from liability under the common enemy doctrine. The Court of Appeals held that since the downstream property owner raised a factual issue as to the classification of the water, summary judgment was inappropriate. The Court of Appeals reasoned,

There was a question of whether the water was from a “natural watercourse” or was merely “surface waters.” That question is to be determined by a trier of fact.

Id. at 820.

Only if the waters are determined to be “surface waters” are the Postemas entitled to seek the shield of the common enemy doctrine. The determination of what classification of water is involved is a question for

the trier of fact and should not be taken from “the jury.”
There are disputed issues of material fact and summary
judgment should not have been granted.

Id. at 821-22.

In the present case, Plaintiffs presented un rebutted testimony that the dike blocked waters from entering natural side channels and therefore continued to be riparian waters. Plaintiffs met the burden of raising a genuine issue of material fact and summary judgment should not be granted. This was a reversible error.

4. The Exception to the Common Enemy Doctrine Applies to Both Downstream and Upstream Property Owners.

Factually, the Plaintiffs’ property is located downstream from the dike. Accordingly, the County and State argued for the first time in their reply briefs on summary judgment that the exception to the common enemy doctrine (for blocking the flow of a natural watercourse) only applies when a downstream property owner causes damage to an upstream owner’s property. *See* State’s Reply Brief at 5 (CP 228); County’s Reply Brief at 3-4 (CP 218-219). But, there is **no basis** in case law, nor any reasonable rationale, for this distinction.

Factually on point is *Snohomish County v. Postema*, cited *infra*, where an upper landowner caused damage to a downstream owner. As discussed above, there was a factual question of whether the upstream

owner blocked a natural watercourse or surface water. Of course, that factual issue would have been irrelevant if the County and State's argument had merit. If the exception to the common enemy doctrine does not protect downstream owners damaged by the blocking of natural watercourse, it was error for the Court of Appeals to remand the case for trial.

Moreover, there is no principled basis for limiting the exception to damaged owners who happen to be upstream from the blockage. The principle behind the exception is that waters flowing in their natural channels are not surface waters, and therefore the common enemy doctrine simply does not apply to those waters. The location of the damaged property has no bearing on the classification of the waters as riparian or surface waters. Accordingly, there is no basis in the common enemy doctrine, or its exception, for distinguishing damages that occur downstream from those that occur upstream.

C. Summary Judgment Cannot be Justified for Lack of Standing.

The County argued below that Plaintiffs did not have standing to assert a constitutional taking claim because it alleges that if a taking occurred in this case, it occurred when the dike was built in 1975. CP 81. Of course, Plaintiffs were not the owners of the property at the time the

dike was built. However, dismissal of Plaintiffs' inverse condemnation claim is not supported by the law.

The obvious flaw in the County's argument is its focus on the time the dike was constructed instead of the time of when the taking (i.e. the injury or damage to the property) actually occurred. Importantly, Plaintiffs owned the property at the time the property was permanently destroyed.

Plaintiffs agree that subsequent purchasers of property may not recover for a taking which occurred prior to their acquisition of the property. *Hoover v. Pierce County*, 79 Wn. App. 427 (1995), *review denied*, 129 Wn.2d 1007. Washington courts have explained that the right to damages for an injury to property is a personal right belonging to the property owner, so the right does not pass to a subsequent purchaser unless expressly conveyed. *Id.* at 433.

However, the taking in this case occurred on June 16, 2002, when Plaintiffs' house was destroyed and their property damaged by the avulsive event. *See DiBlasi v. City of Seattle*, 136 Wn.2d 865, 877 (1998) (taking occurs when the private property is damaged). There was no evidence that Plaintiffs had ever experienced prior loss on their property until the avulsive event occurred on June 16, 2002. Indeed, Plaintiff Brad Sturgill testified that the property had no previous water damage. CP 123.

Until Plaintiffs' property was in fact injured, a taking case was premature. Indeed, Plaintiffs would have been laughed out of court, and probably hit with sanctions, if they had filed an inverse condemnation action prior to June 16, 2002, because until that date, they had not been damaged. Until the event occurred, there was no compensation due.

Dismissal of Plaintiffs' inverse condemnation claim cannot be upheld on the County's meritless argument that Plaintiffs lacked standing to bring their inverse condemnation claim.

D. A Taking Does Not Require that it be Contemplated.

The County made the absurd argument below that it cannot be liable for any damage that occurred to Plaintiffs' property because such damage was not "contemplated" when the dike was constructed. CP 83-85. Although it is doubtful that the trial court granted summary judgment on this basis, Plaintiffs address this issue as well to show that summary judgment cannot be upheld on this basis. The law on inverse condemnation specifically rejects the County's argument.

The authority cited by the County for this argument was based upon case law that has been overruled. Specifically, the cases offered by the County rely upon *Jorguson v. Seattle*, 80 Wash. 126, 130-131 (1914).

Jorguson was a landslide damage case based on "the inadequacy of the city's plan." The Court in *Jorguson* wrote the following:

The above-mentioned provision of the Constitution [Article 1, section 16] was never intended to apply to consequential or resultant damages not anticipated in, nor part of, the plan of a public work. It was never intended to apply to damages resulting to private property from the negligent or wrongful use of public property. As to such damages, tortious in their very inception, the injured person is remitted to his remedy on the case, as in other cases of tortious taking or injury.

Id. at 130-131.

The County has capitalized on the above language to argue that it can be insulated from liability since it did not intend to damage Plaintiffs' property. However, *Jorguson* was simply noting that the cause of action sounded in tort, not inverse condemnation.

A later Washington case called into doubt the *Jorguson* language cited by the County. See *Wong Kee Jun v. Seattle*, 143 Wash. 479 (1927). In *Wong Kee Jun*, the Washington Supreme Court reviewed numerous prior cases for the purpose of establishing "a rule by which litigants and trial courts may in the future determine into which class a given case may fall." *Id.* at 480-481. The Court noted that its previous decisions had created confusion. *Id.* at 480. The Court set out the rule to be applied in future cases

[T]he only inharmony arises from the *Casassa* and *Jorguson* case and those which attempt to follow them. In the beginning they were a not unjustified attempt to draw a distinction which does exist, but the line drawn

was too fine, and the results show that it leads to confusion. So far as out of harmony with what is here said, those cases are **overruled**.

Id. at 505 (emphasis added). Rather than following the negligence or “inadequate plan” analysis, the Court established the rule as follows:

[T]he courts must look only to the taking, and not to the manner in which the taking was consummated. A mere **temporary interference** with a private property right in the progress of the work, especially such as might have been avoided by due care, **would probably be tortious only**. ... [B]ut the removal of lateral support, causing slides or any **permanent** invasion of private property, must be held to come within the constitutional inhibition.

Id. (emphasis added). In other words, where the government interference is temporary, tort remedies such as trespass and negligence may be the only available relief. But permanent damage and invasion must be viewed as the equivalent of taking the property and must be compensated. The notion that a negligent plan in constructing or carrying out a public project can insulate the government from takings liability is no longer the law.

Indeed, a recent case recognizes that the principle in *Jorguson* was overruled by *Wong Kee Jun*. See *Lambier v. City of Kennewick*, 56 Wn. App. 275 (1989), *review denied*, 114 Wn.2d 1016 (1990). In *Lambier*, the court specifically held, the “unintended results of a governmental act may constitute a taking.” *Lambier*, 56 Wn. App. at 281; *see also* Barer, Stanley H., Distinguishing Eminent Domain From Police Power And Tort, 38

Wash. L. Rev. 607, 622 (1963) “[B]oth the ‘negligent plan’ rationale and the ‘not necessarily anticipated by the plan’ approach were put to rest with the decision in *Wong Kee Jun v. City of Seattle*.”).

A government entity is not immune from inverse condemnation liability simply by raising the “I didn’t mean to” defense. Whether or not Defendants intended the avulsion to occur is not a basis to insulate them from paying compensation which the takings clause guarantees to private property owners. Summary judgment on this basis is improper.

E. Tort Immunity Statute Does Not Preclude Inverse Condemnation Liability.

The County and State both argued below they were immune from liability in this case by **statute** because the dike was constructed for flood control purposes. Although it appears that the trial court granted summary judgment on the common enemy defense, the trial court may have agreed with the County and State’s argument that the tort immunity statutes provides a complete defense to “all claims” arising from flood control activities, including Plaintiffs’ inverse condemnation claim. County’s Reply Brief at 2 (CP 217); State’s Reply Brief at 3 (CP 226). Any immunity can only apply to the tort claims and cannot bar the inverse condemnation claim based on the State Constitution. *See Halverson*, 139 Wn.2d at 12 (noting that immunity under RCW 86.12.037 does not apply

to claims based on constitutional grounds). Summary judgment on this argument is contrary to law and summary judgment should be reversed.

Defendants relied upon *Short v. Pierce County*, 194 Wash. 421 (1938) to argue they are immune from all liability in this case. In *Short*, the plaintiff complained that a dike constructed by the County to protect the plaintiff's property had a hole in it. Rather than fixing the hole with concrete, the County filled the hole with stakes and brush. Of course, the repair was washed out in a high-water period and the entire concrete revetment therefore failed and washed down the river. Without the revetment, plaintiff's property was damaged. *Id.* at 428-29.

In addressing the immunity statute enacted by chapter 185, Laws of 1921, the appellant contended that immunity could not apply to an inverse condemnation claim under article 1, section 16 of the constitution. *Id.* at 427-28. However, the Supreme Court viewed these facts as not giving rise to a takings claim, but to a negligence claim.

Appellants complaint seems to have been drafted upon the theory of **negligence** on the part of respondents, appellants alleging the existence of a hole in the bulkhead above their property ...[and that respondents] failed to repair the same with concrete, but filled the hole with stakes and brush.

Id. (emphasis added). Of course, as a tort, the immunity statute had applicability.

Significantly, the appellants also claimed a taking based on property damage caused by County agents in constructing permanent flood improvements. The Court did not apply any immunity defense as to those allegations.

We do hold, however, that for the use of appellants' property for weeks and months following the period of the flood, and for any damage which appellants can show resulted from this use, by way of destruction of their berry bushes or vines and the frames supporting the same, or otherwise, appellants are entitled to recover under the constitutional prohibition against the taking or damaging of private property without just compensation.

Id. at 435-36.

This understanding of *Short v. Pierce County* is confirmed by the Washington Supreme Court in *Paulson v. Pierce County*, 99 Wn.2d 645 (1983).

RCW 86.12.037 was enacted by the Legislature in 1921 to shield counties from liability for their efforts to protect the public from flood damage. *See Short v. Pierce Cy.*, 194 Wash. 421, 430-32 (1938). RCW 86.12.037 provides immunity to counties even where their **negligence** in the construction and maintenance of flood control devices results in damage to private property during floods or other periods of high water. *Short*, 194 Wash. at 431.

Id. at 649 (emphasis added). Significantly, the Court went on to note that immunity does not extend to state constitutional claims under article 1, section 16.

RCW 86.12.037 does not affect fundamental rights. The statute does not prohibit recovery under U.S. Const. Amends. 5 or 14 or Const. Art. 1, § 16 where a person's property is taken for a public purpose by a county in the exercise of its police powers.

Id. at 652 (emphasis added).

Likewise, in *Halverson* the Court cited *Paulsen* and stated that immunity under RCW 86.12.037 is "inapplicable" when the complaint is based on constitutional grounds. *Halverson*, 139 Wash.2d at 12; see also *Deaconess Hospital v. State of Washington*, 10 Wn. App. 475, 480 (1974), review denied, 84 Wn.2d 1001 ("the legislature may not substantially impair article 1, section 16 rights, nor place an unreasonable burden on their exercise").

In summary, the legislature cannot enact legislation granting immunity to government from the requirements of the State Constitution. To the extent summary judgment was granted on such a basis, the conclusion is contrary to law and should be reversed.

CONCLUSION

The undisputed evidence in this case is that the dike completed by the County and State as a public project caused the destruction of Plaintiffs' house and property. In order for the summary judgment motion to be upheld on appeal based on the common enemy doctrine, the trial court must have had before it an undisputed fact that the waters blocked

by the dike would have been surface waters. But there was no such evidence in this case. Indeed, there was contrary expert testimony that the waters held back by the dike were riparian waters that would have otherwise flowed through natural side channels. Granting summary judgment was contrary to law and should be reversed by this Court.

RESPECTFULLY SUBMITTED this 12th day of June, 2006.

GROEN STEPHENS & KLINGE LLP

By: 
John M. Groen, WSBA #20864
Diana M. Kirchheim, WSBA #29791
Attorneys for Appellants

DECLARATION OF SERVICE

I, Linda Hall, declare: I am not a party in this action. I reside in the State of Washington and am employed by Groen Stephens & Klinge LLP of Bellevue, Washington.

On June 12, 2006, a true copy of Appellants' Opening Brief was placed in envelopes, which envelopes with postage thereon fully prepaid were then sealed and deposited in a mailbox regularly maintained by the United State Postal Service in Bellevue, Washington addressed to:

Attorney for State of Washington:
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Washington State Attorney
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Karr Tuttle Campbell
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I declare under penalty of perjury that the foregoing is true and correct and that this declaration was executed this 12th day of June, 2006 at Bellevue, Washington.



Linda Hall

APPENDIX A

RECEIVED FEB 24 2006

The Honorable John Hotchkiss

Date: March 7, 2006

Time: 3:00 p.m.

FILED

FEB 24 2006

FILM NO. JUANITA S. KOCH
DOUGLAS COUNTY CLERK
WATERVILLE, WASH.
BY _____ DEPUTY

SUPERIOR COURT OF WASHINGTON

FOR DOUGLAS COUNTY

DON L. FITZPATRICK and PAM FITZPATRICK,)
husband and wife; BRAD STURGILL and)
HEATHER FITZPATRICK STURGILL, husband)
and wife,)

Plaintiffs,)

vs.)

OKANOGAN COUNTY; THE STATE OF)
WASHINGTON; JOHN L. HAYES and JANE)
DOE HAYES, husband and wife; and METHOW)
INSTITUTE FOUNDATION,)

Defendants.)

No. 05-2-00587-9

DECLARATION OF JEFFREY B. BRADLEY, PH.D., P.E., D.WRE

I, Jeffrey B. Bradley, declare as follows:

1. I am a United States citizen over the age of twenty-one, have personal knowledge of the facts stated herein and am competent to testify to the matters stated in this Declaration.

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DECLARATION OF JEFFREY B. BRADLEY, PH.D.
P.E., D.WRE - 1

COPY

00131

1 2. Attached as Exhibit 1 is a true and correct copy of my curriculum vitae. I am a
2 registered engineer with over 30 years experience in managing complete water resource
3 issues. I also have a Ph.D. in Civil Engineering – Hydraulics. I am the current President of
4 the American Academy of Water Resources Engineers and Past President of the American
5 Society of Civil Engineers Environmental and Water Resources Institute.

6 3. I completed a site visit to the Fitzpatrick/Sturgill property on August 24, 2004.
7 This site visit included an airplane flyover of the Methow River at the location of the 2002
8 avulsion and the surrounding reach, a ground level investigation of the avulsion site, along the
9 dike, and the Fitzpatrick property. I also had discussions with Brad Sturgill. My site visit
10 allowed me to observe the geomorphology of the Methow River in the vicinity of the avulsion
11 site from a large scale perspective (airplane) and small scale perspective (ground level).

12 4. I also acquired peak streamflow data from the United States Geological Survey
13 (USGS) for four gages on the Methow River and performed flood frequency analysis of the
14 gage data using the computer program HEC-FFA. I also reviewed aerial photographs of the
15 project area to analyze the historical meander patterns and to analyze the amount of side
16 channel blockage from the construction of dikes on the right bank.

17 5. Attached as Exhibit 2 is a true and correct copy of a letter containing my expert
18 conclusions in this case which is incorporated into this Declaration.

19 6. It is my expert opinion that there are several naturally defined side channels, or
20 watercourses, in the right floodplain of the Methow River in the vicinity of the dike. These
21 side channels relieve flow from the main channel as the water level rises during a high flow
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1 event. Allowing the river to access these side channel drainways eases the amount of flow
2 that is confined to the main channel and thus reduces the energy, velocity, flow, and sediment
3 transport capacity and erosive power of the main channel.

4 7. Attachment A to my letter (attached as Exhibit B to my Declaration) is a series of
5 aerial photographs that illustrates the side channels in the right floodplain and the construction
6 of the dikes on the right bank. In this section of the Methow River, it is clear that one by one
7 the side channels in the right floodplain were blocked off with the construction of dikes
8 beginning in 1975 through the 1999 Army Corps of Engineers flood fight. This action has
9 confined flow to the main channel during high flows.

10 8. The 2004 photograph (Attachment A to my letter or Exhibit B to my
11 Declaration) includes the location of a proposed set-back levee by the Corps of Engineers in
12 the 1970's with two alignments. This levee was never constructed due to several factors
13 including funding, timing, and acquisition of required property. It is clear from the layout of
14 this proposed levee that it would have allowed the river to access all of the side channels with
15 Alignment A and all but one with Alignment B. By allowing the river to access these natural
16 side channels, it would have been able to meander more naturally and the avulsion that
17 occurred in 2002 would not have occurred.

18 9. The construction of the dikes limited the path the avulsion could take to the
19 one that it took in 2002. All other side channels had been blocked by the dike and in June
20 2002, the river had only one path to take and that was across the large meander bend which
21 resulted in the loss of the Fitzpatrick property.

1 I declare under penalty of perjury under the laws of the State of Washington that the
2 foregoing is true and correct and was executed by me this 22nd day of February, 2006 at

3 16870 W. Bernardo Dr, San Diego, CA

4 
5 JEFFREY B. BRADLEY

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DECLARATION OF JEFFREY B BRADLEY, Ph D,
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EXHIBIT 1



Jeffrey B. Bradley, Ph.D., P.E.

President

Dr Bradley is President of WEST Consultants, Inc. He is a Registered Professional Engineer in Arizona, California, Colorado, Oregon, Washington and Idaho. Dr Bradley is a nationally recognized expert with twenty-eight years experience in hydraulics, hydrology and sediment transport in the private sector, while with the Corps of Engineers, and at Colorado State University. Dr Bradley is also nationally and internationally recognized for his work on mud and debris flows and their effects on alluvial fan flooding. He has worked on many investigations including the John Day Dam drawdown studies, the Upper Mississippi cumulative effects study, hydraulic modeling for flood insurance studies, bridge scour assessments throughout the western US, dambreak inundation studies, hydrologic modeling and analysis for dam safety investigations, development of a geomorphic stream classification scheme for the state of Washington, development of a stream classification expert system for the sediment transport model, BRISTARS, Mount St Helens sedimentation studies, the analysis of the Lawn Lake Dam failure and debris flow, the Lake Estes sedimentation study, the development of sedimentation study methodologies for the U S Fish and Wildlife Service, sedimentation impact studies on fisheries throughout the Northwest, extensive investigation of high sediment concentration flow phenomena, the Zink Dam sedimentation study, the Kern and Peace River ordinary high water litigations, and the Keene Ranch groundwater modeling study. Dr Bradley has also coordinated and lectured in a number of short courses, including Bridge Scour and HEC-RAS River Analysis System for the American Society of Civil Engineers, HEC-6, Sedimentation in Rivers and Reservoirs, Streambank Stabilization for the International Erosion Control Association, Sedimentation in Forested Watersheds, Mudflows and Alluvial Fan Flooding, and HEC-RAS River Analysis System for the National Highway Institute.

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Professional Societies

American Geophysical Union

*American Public Works
Association*

*American Society of Civil
Engineers*

*American Society of Engineers
for Social Responsibility*

*American Water Resources
Association*

*Association of State Flooplain
Managers*

*International Association for
Hydraulic Research*

*International Erosion Control
Association*

*Phi Eta Sigma Honorary
Society*

Dr Bradley has written over seventy-five professional papers and reports in the fields of hydraulics, hydrology, and sedimentation engineering. Dr Bradley is editor of the books *The Physics of Sediment Transport by Wind and Water*, *A Collection of Hallmark Papers by R A Bagnold* and *"Gravel Bed Rivers and the Environment"*. He has written a sedimentation manual for the U S Fish and Wildlife Service. Dr Bradley is past President of the ASCE Environmental and Water Resources Institute. He is past Chair of the Executive Committee for the ASCE Water Resources Engineering Division. He has served as a member of ASCE task committees on the Effects of High Concentrations on Flow and Sediment Transport, Sedimentation and Stream Habitat Evaluation, and Bridge Scour. He has been a control member of the ASCE Task Committee to revise Manual 54 - *Sedimentation Manual* and is a past chair of the ASCE Sedimentation Committee.

Dr Bradley is a Fellow of ASCE, and a member of ASFPM, APWA, AWRA, AGU, AESR, IAHR and IECA. He is involved in ASCE activities at both national and local levels, has served on national Engineering Management Division committees, and has held several committee chairs in Colorado and Oregon, as well as having been Director and Treasurer of the Oregon Section.

Jeffrey B. Bradley, Ph.D., P.E.

PROFESSIONAL REGISTRATION

- Professional Engineer, Arizona No 21974
- Professional Engineer, California No C030245
- Professional Engineer, Colorado No 19737
- Professional Engineer, Oregon No 10646
- Professional Engineer, Washington No 0000928
- Professional Engineer, Idaho No 7794

NATIONAL COMMITTEE AND CONFERENCE ASSIGNMENTS

- Chair, ASCE National Water Policy Committee, 2002 – Present
- Member, ASCE President's Task Committee on Institute Operations, 2001 – Present
- Member, ASCE President's Task Committee on Governance, 2001 – Present
- President, Governing Board Member, Environmental and Water Resources Institute, ASCE 1999 – 2002
- Chair, EWRI Awards and Nominations Committees, 2000 - 2002
- Chair, ASCE Executive Committee, Water Resources Engineering Division, 1994 -1998
- Control Member, ASCE Task Committee to Revise Manual 54, The Sedimentation Manual, 1991- Present
- Chairman & Member, ASCE Sedimentation Committee, 1987 - 1991
- Member, ASCE Organizing Committee, National Conference on Hydraulic Engineering, San Diego 1990
- Corresponding Member, ASCE Task Committee on the Analysis of Laboratory and Field Sediment Data Accuracy and Availability, 1987 - Present
- Conference Coordinator Colorado Water Engineering and Management Conference, Ft Collins, Colorado, February 1987
- Corresponding Member, ASCE Sedimentation Committee, 1986 - 1987
- Corresponding Member, ASCE Task Committee Sedimentation and Stream Habitat Evaluation, 1986 - 1989
- Working Member, AWRA Groundwater Group, 1986 - 1987
- Control Member, ASCE National Task Committee on Effects of High Concentrations on Flow and Sediment Transport, 1983 - 1986
- Zone III Member, ASCE Committee on Engineering Management at the Individual Level (EMIL), 1985 - 1989
- Corresponding Member, ASCE Committee on Engineering Management at the Individual Level (EMIL), 1983 - 1985

STATE COMMITTEES

- Chairman, ASCE Seattle Section, Engineering Management Committee, 1993 - 1996
- Chairman, ASCE Colorado Section Program Committee, 1986 - 1987
- Chairman, ASCE Colorado Section Awards Committee, 1985 - 1986
- Chairman, ASCE Colorado Section Continuing Education Committee, 1984 - 1985
- Treasurer, ASCE Oregon Section, 1981-1982
- Delegate, Engineers Coordinating Council of Oregon, Council Reports to Governor on Engineering Appointments in State, 1981 - 1982
- Director, ASCE Oregon Section Board of Directors, 1980
- Chairman ASCE Oregon Section Membership and Memoirs Committee, 1978 - 1979

INSTRUCTIONAL EXPERIENCE

- HEC-RAS for the National Highway Institute, multiple locations
- Advanced HEC-2 for King County, Seattle, Washington

Jeffrey B. Bradley, Ph.D., P.E.

- Two-Dimensional Modeling Class, ASCE Water Resources Planning & Management Conference, Seattle, Washington
- HEC-2 Short Course by WEST Consultants, San Diego, California
- Sedimentation in Forested Watersheds, U S Forest Service, Alaska and Montana
- Short Course on Bank and Channel Protection in Rivers, International Erosion Control Association, Vancouver, British Columbia, Canada
- Open Channel Hydraulics graduate level course at San Diego State University, CA
- HEC 6 Short Course, Hydrologic Engineering Center, Davis, California
- Mudflows and Alluvial Fan Flooding Short Course, WEST Consultants, San Diego, California
- Suspended Sediment and the Riverine Environment, Oregon State University
- Flood Plain Management, short course by FEMA and CSU, Colorado Springs, Colorado
- Professional Engineer Review Course, Portland State University, Portland, Oregon
- Fluid Mechanics, Hydraulics, Portland State University, Portland, Oregon
- Short Course on Sediment Problems in Rivers, Oregon State University, Corvallis, Oregon

PARTIAL PROJECT EXPERIENCE

Water Quality and Groundwater

- Development of Watershed Analysis Methodology, Cumulative Effects, Washington
- Tibbetts Creek, Washington EIS
- Tolt River, Washington, Gravel Quality Study
- Cedar River, Washington, Study of Incipient Motion of Spanning Gravel
- East Fork Lewis River, Washington, Gravel Mining EIS
- Keene Ranch, California, Groundwater Modeling Study
- Willamette River Greenway Study
- Young's Bay Environmental and Sedimentation Assessment
- Strube Dam Temperature Study, WRE Temperature Model
- Elk Creek and Lost Creek Dams Turbidity Studies

Sedimentation and Erosion

- Upper Mississippi River Cumulative Effects Study Rock Island District Corps of Engineers
- Bridge Scour, Hydraulics and Erosion, Washington Department of Transportation
- Bridge Scour, Hydraulics and Erosion, Oregon Department of Transportation
- Snoqualmie Ridge, Washington, Sedimentation Study
- Tongass National Forest, Alaska, Sedimentation and Fisheries Evaluation
- Development of Geomorphic-based Stream Classification for the State of Washington
- Gila and Salt Rivers, Arizona, Pipeline Erosion Studies
- Grande Ronde River Sedimentation Study
- Mount St Helens, Washington, Sedimentation Studies, HEC-6, and Other Analyses
- Lake Estes, Colorado, Sedimentation Study Following the Lawn Lake Dam Failure
- Movable Bed Sediment and Water Routing Models, U S Fish & Wildlife Service
- Sediment Transport Methodologies for Field Applications, National Park Service
- Zink Dam, Oklahoma, Sedimentation Study (HEC-6, FESWMS-2DH)
- Okanogan River, Washington, Sediment Litigation
- Nooksack River, Washington, Gravel Removal Study, Project Delineation
- Erosion Assessment of San Juan Mainline Gas Pipeline Expansion, New Mexico and Arizona
- Erosion Assessment of Baja Pipeline, Arizona
- Pipeline Scour Assessments during January 1993 Arizona Floods

Hydraulics & Stable Channel Analysis

- John Day Drawdown Studies, Portland District Corps of Engineers

Jeffrey B. Bradley, Ph.D., P.E.

- Stehekin River, Washington, Streambank Stabilization
- South Snoqualmie River and Tolt River Flood Mitigation Study Washington
- Gee Creek Flood Insurance Study, Vancouver, Washington
- Cowlitz River Flood Insurance Study, Washington
- Grants Pass Flood Insurance Study, Oregon
- Dambreak Inundation Studies, NWS DAMBRK Model, Applegate Dam, Lookout Point Dam, Dorena Dam, Cottage Grove Dam, Dexter Dam Oregon
- Development of a River Classification for Use in an Expert System, BRISTARS Computer Model, Channel Widening Simulation Model, FHA
- Buena Vista Creek, California, Channel Design
- Kern River, California, Litigation

Hydrology

- Non Federal Dam Safety Investigations Goodrich Dam, Mercer Dam, Wallowa Dam, and Winchester Dam, Oregon
- Pearson Airpark and Steigerwald Lake Interior Drainage Studies, Washington
- Portland Urban Study, Penn State Urban Runoff Model
- Washougal, Rogue, and Applegate Rivers Discharge Frequency Studies, Oregon
- Nestor Creek Hydrologic Study, California
- Lane County Flood Insurance Study, Oregon
- Elk Creek Incremental Flood Damage Analysis, HEC-1, Oregon

Other

- Days Island Marina Litigation, Washington
- Tolt River Stream Migration Litigation, Washington
- Stillaquamish River Flood Litigation, Washington
- Columbia River Irrigation Depletion Study
- Numerous Instream Flow Determinations
- Peace River, Florida, Litigation on Ordinary High Water
- Tijuana River Study, Litigation
- Santa Clara River, Freeman Diversion Structure Sediment Exclusion Investigation

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EXHIBIT 2



February 22, 2006

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Hydraulics
Hydrology
Sedimentation
Water Quality
Erosion Control
Environmental Services

Heather Fitzpatrick Sturgill and Brad Sturgill
521 12th Avenue North
Edmonds, Washington 98020

Dear Mr and Mrs Sturgill

WEST Consultants is led by Jeffrey B Bradley, Ph D , P E , D WRE, a registered engineer with over 30 years of experience in managing complex water resource issues. As the current president of the American Academy of Water Resources Engineers and past president of the American Society of Civil Engineers Environmental and Water Resources Institute, he is a nationally recognized figure in the field of water resources. He has conducted a large number and wide range of water resource investigations for federal, state, and local agencies and private industry. He has extensive relevant experience managing large, technically complex multidisciplinary projects for the Federal Emergency Management Agency, the Corps of Engineers, and state Transportation agencies. He is well experienced in managing water policy issues and effectively presenting complex information to diverse stakeholder groups. WEST Consultants provides engineering and environmental services to help clients with all aspects of water resources related projects. Services include applied research, physical and numerical modeling, field investigations, monitoring, technology transfer, and expert witness testimony.

Dr Bradley completed a site visit to the Fitzpatrick property on August 24, 2004. This site visit included an airplane flyover of the Methow River at the location of the 2002 avulsion and the surrounding reach, a ground level investigation of the avulsion site, along the dike, the Fitzpatrick property, and had discussions with the property owners, Fitzpatrick and Sturgill. This site visit allowed Dr Bradley to observe the geomorphology of the Methow River in the vicinity of the avulsion site from a large scale perspective (airplane) and small scale perspective (ground level).

Peak streamflow data was acquired from the United States Geological Survey (USGS) for four gages on the Methow River summarized in Table 1. The location of these gages is shown in Figure 1. Flood frequency analysis of the gage data was performed on each of these gages using the computer program HEC-FFA (Reference 1) and the results are summarized in Table 2. The drainage area at the dike location is approximately 425 square miles.

Table 1 Methow River Gage Summary

Gage Number	Gage Description	Drainage Area (mi ²)	Years of Record	Period of Record
12447383	Methow River above Goat Creek near Mazama, WA	373	14	1991-2004
12448500	Methow River at Winthrop, WA	1,007	16	1972, 1990-2004
12449500	Methow River at Twisp, WA	1,301	52	1920-1929, 1934 1962, 1991-2004
12449950	Methow River near Pateros, WA	1,772	47	1948, 1959 2004

These gages were not analyzed to get peak streamflows at the dike location, rather to determine what magnitude of flood event occurred during the 2002 avulsion and the 1999 dike breach. The Winthrop, Twisp, and Pateros gages have similar results showing that the 2002 flow was approximately a 2-year storm event and the 1999 flow was approximately a 10-year event. The Mazama gage is closest to the dike location, but has the shortest period of record and does not include any of the peak flows that occurred prior to 1991, therefore, it is not statistically as accurate as the other three gages.

Table 2 Flood Frequency Analysis for Methow River Gages

	Mazama #12447383	Winthrop #12448500	Twisp #12449500	Pateros #12449950
Drainage Area (mi ²)	373	1,007	1,301	1,772
2-year	5,190	9,170	11,000	11,600
10-year	8,250	17,300	19,600	22,000
25-year	10,000	23,000	24,000	28,500
50-year	11,200	27,600	27,300	33,800
100-year	12,600	33,300	30,700	39,800
2002 Flow	6,230	9,190	10,300	10,400
2002 Storm Event	~ 3 3-year flow	~ 2-year flow	~ 1 8-year flow	~ 1 8-year flow
1999 Flow	9,440	17,000	18,000	20,800
1999 Storm Event	~ 20-year flow	~ 10-year flow	~ 8-year flow	~ 8-year flow

Historic aerial photographs of the project area were obtained from the Corps of Engineers (COE) Seattle District for the following years: 1945, 1948 during flood, and 1948 after flood. Historic aerial photographs of the project area were obtained from the Washington Department of Transportation (WSDOT) for the following years: 1966, 1981, 1992, 2000, and 2004. These aerial photographs were used (1) to analyze the Methow River's historical meander patterns, and (2) to analyze the amount of side channel blockage from the construction of dikes on the right bank.

(1) Historical Analysis

The historical meander patterns were analyzed in the vicinity of the Fitzpatrick property for the last 60 years. The reach analyzed extended approximately 2 miles downstream of the Fitzpatrick property to the Highway 20 Bridge and 2 miles upstream where the river abuts against Highway 20. These limits have proven to be stable points throughout the 60 year period. The main channel of the river for each of the photographs were compared to observe variations in the historic meander pattern of the river.

1945 to 1966 The largest flood on record occurred during this time period in 1948. No major channel avulsions occurred during this flood, only a few small meanders began to form. Between 1948 and 1966, the meanders continued to grow, including a meander in the location of the dike constructed in 1975. It is clear from the progression of the river during this time period that the meander bend where the dike was built was pushing towards the southeast and the dike stopped this progression.

1966 to 1981 Several changes occurred during this time period. The second, third, and fifth largest floods on record at the Pateros gage occurred in 1972, 1974, and 1967, respectively. These floods caused damage to irrigation canals in the right overbank and the newly constructed Highway 20 and people began to worry that the Methow River would find a new channel and threaten the new highway and downstream bridge (Reference 2 and 3). In response to this damage, a dike was constructed in 1975 on the right bank of the river (Reference 4). No aerial photographs were available surrounding the 1975 construction of the dike, the closest chronologically to be obtained was the 1966 and 1981, therefore the condition of the river after the three floods in 1967, 1972, and 1974 is not known. However, it can be observed in the 1981 photograph, the flow scars from the river are approximately 180 feet to the southeast of the 1966 photograph, indicating that the river had meandered this far at its peak progression to the southeast prior to the dike construction in 1975.

The river was still accessing the right overbank by the irrigation ditch inlet located on another meander a few hundred feet upstream. This flow path was blocked in 1978 by the construction of the upper dike, which included 2-24" culverts for irrigation flows (Reference 5). Combined with the straightening of the channel with the dike construction, the resulting river has a fairly straight path for nearly three miles except for the large meander just downstream of the newly constructed dike. When a channel is straightened, naturally or by man, the change in elevation remains the same while the length is shortened. This results in a steeper slope and higher velocities, which leads to higher sediment transport capacity and possibly increased bank erosion and stream bed degradation.

1981 to 2000 The river remained fairly stable in this reach during this time period. The fourth largest recorded flood at Pateros occurred in 1983. This flood caused damage to the upper dike and lower dike, prompting repair and reconstruction (Reference 6). The upper dike was again reinforced in 1987 after more damage occurred (Reference 7). The lower dike was extended to the east between 1981 and 1992, but most likely the extension occurred in 1983 after the flood damage. A County inspection report (Reference 8) stated that John Hayes was in the process of rebuilding 400 feet of the southerly portion of the dike that was washed out in the 1983 flood, but it is obvious that this southeastern most section was an extension of the original dike sometime between 1981 and 1992 rather than a repair to the existing dike.

The 1999 flood was the sixth largest flood on record and was approximately a 10-year flood event. This event resulted in the overtopping and eventual break in the southeastern most section.

of the dike (Reference 9) The Corps of Engineers was called in as a result of the emergency and repaired the dike as close to the original design as they could during high waters (Reference 10) Several documents indicate that the new dike is larger and not along the exact alignment as the original dike (Reference 11, 12, and 13) During the repair, the downstream end of the levee began to erode so the Corps had to tie the eastern end of the dike into high ground to the southeast to prevent it from washing away during the flood The Corps stated that this was only a temporary fix and the County was given conservation measures in the 2001 Biological Assessment to address An overflow channel near the upper dike was also filled in during the flood fight to provide road access for the machinery The Corps says this action was done prior to their arrival (Reference 10)

2000 to 2004 In June 2002, a bankfull flood event occurred with an approximate 2-year recurrence interval A bankfull flood event is when the water level in the river reaches the top of the banks and at this point, the stream power is maximized and the stream does the most channel forming work As the water level increases above bankfull, the flow is allowed in the floodplain and the energy in the main channel can be reduced During the bankfull event in June 2002, the combination of the dike and an undocumented log jam located across from the downstream end of the dike caused a constraint in the flow path of the river A localized backwater effect occurred such that the constriction caused water to back up upstream of the constriction and once the pressure became high enough, the log jam broke and water flooded straight across the meander bend creating the avulsion path (Reference 14) This path was directed at the Fitzpatrick property With the shortened and straightened path of the river, the erosive power of the river was exacerbated and the river began attacking the bank at their property It proceeded to do so for approximately 100 feet and resulted in the loss of the Fitzpatrick house into the river Their property was located on an alluvial fan of a tributary creek and had been a stable location for sixty years of documented aerial photography

(2) Side Channel Analysis

There are several naturally defined side channels, or watercourses, in the right floodplain of the Methow River in the vicinity of the dike These side channels relieve flow from the main channel as the water level rises during a high flow event Allowing the river to access these side channel drainways eases the amount of flow that is confined to the main channel and thus reduces the energy, velocity, flow, and sediment transport capacity and erosive power of the main channel

Attachment A is a series of aerial photographs that illustrates the side channels in the right floodplain and the construction of the dikes on the right bank In this section of the Methow River, it is clear that one by one the side channels in the right floodplain were blocked off with the construction of dikes beginning in 1975 through the 1999 COE flood fight This action has confined flow to the main channel during high flows The 2004 photograph in Attachment A includes the location of a proposed set-back levee by the Corps of Engineers in the 1970's with two alignments This levee was never constructed due to several factors including funding, timing, and acquisition of required property (Reference 15) It is clear from the layout of this proposed levee that it would have allowed the river to access all of the side channels with Alignment A and all but one with Alignment B By allowing the river to access these natural side channels, it would have been able to meander more naturally and the avulsion that occurred in 2002 would not have occurred

The construction of the dikes limited the path the avulsion could take to the one that it took in 2002 All other side channels had been blocked by the dike and in June 2002, the river had only

one path to take and that was across the large meander bend which resulted in the loss of the Fitzpatrick property

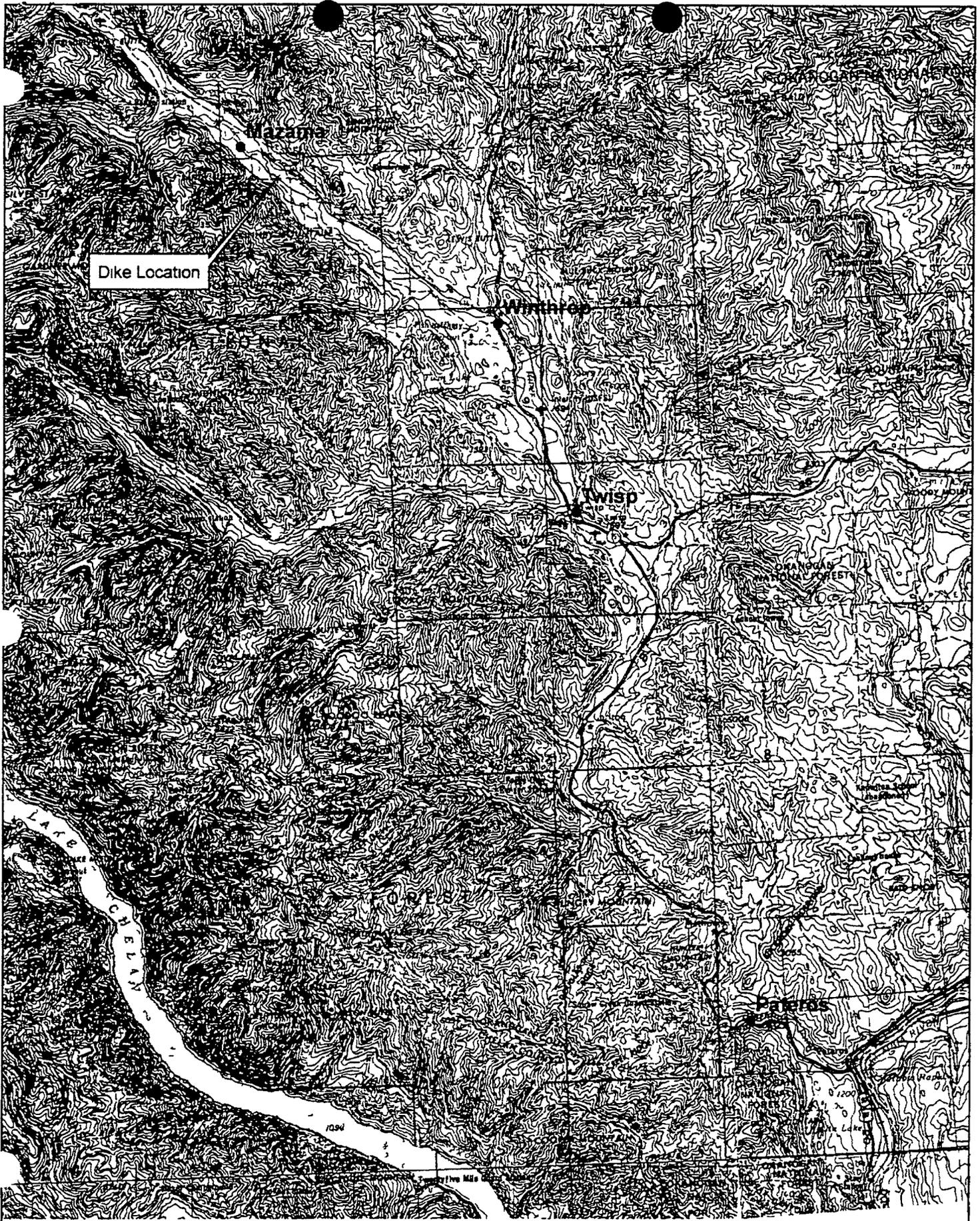
Sincerely,

A handwritten signature in cursive script, appearing to read "Jeffrey B. Bradley".

Jeffrey B Bradley

References

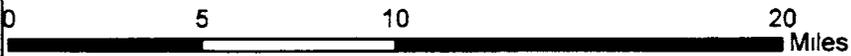
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- 2 Letter from David Swanson, Washington State Highway Department, to W M Foster, July 12 1974
- 3 Letter from Agnes Boesel, Winthrop Grange, to Colonel Raymond J Keneigl, Corps of Engineers Seattle District, November 27, 1974
- 4 Agreement between Okanogan County and Washington Department of Ecology, May 7 1975
- 5 Agreement between Okanogan County and Washington Department of Ecology, October 17, 1983
- 6 Hydraulic Project Approval granted to John Hayes, October 12, 1983
- 7 Hydraulic Project Approval granted to Upper Methow Irrigation District, September 4, 1987
- 8 Okanogan Public Works Inspection Report, No ME-15-74, date unknown
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- 11 Memo from Cal Treser, Washington Department of Fish and Wildlife Enforcement, to Sergeant Ford, January 27, 2000
- 12 Field inspection report by Al Wald, Washington Department of Ecology, and Lynda Hoffman, Washington Department of Fish and Wildlife, July 26, 1999
- 13 Letter from Al Wald, Washington Department of Ecology, to Mark Schuppe, Shoreline Permits Coordination, November 30, 1999
- 14 Memo from Andreas Q Kammereck, Golder Associates, to Heather Fitzpatrick-Sturgill, July 12, 2002
- 15 Letter from Raymond J Kineigl, Corps of Engineers Seattle District, to Ed Winslow, Okanogan County, April 2, 1975



Dike Location

WISP

CHELAN LAKE

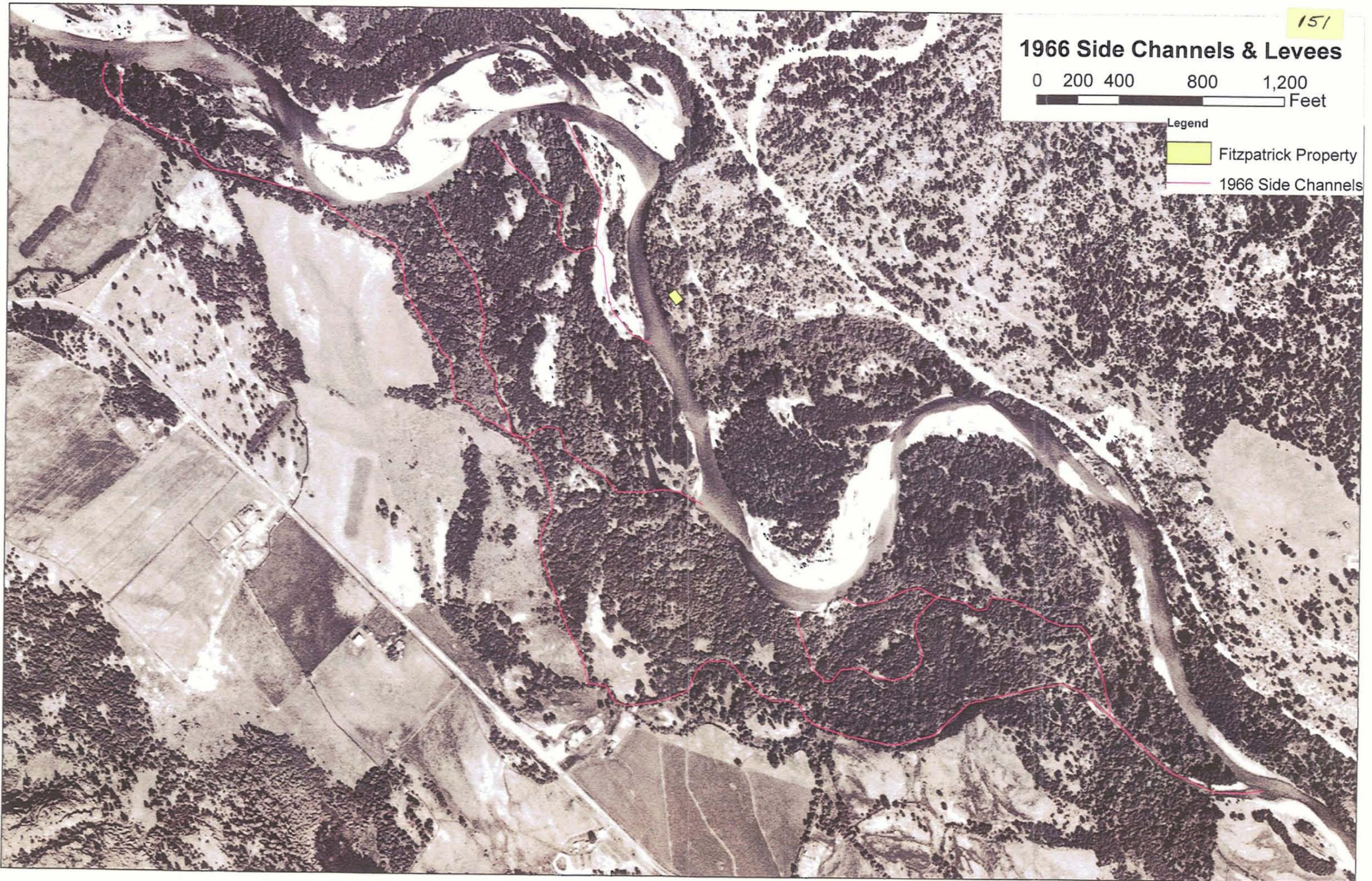


Methow River Gage Locations

1966 Side Channels & Levees



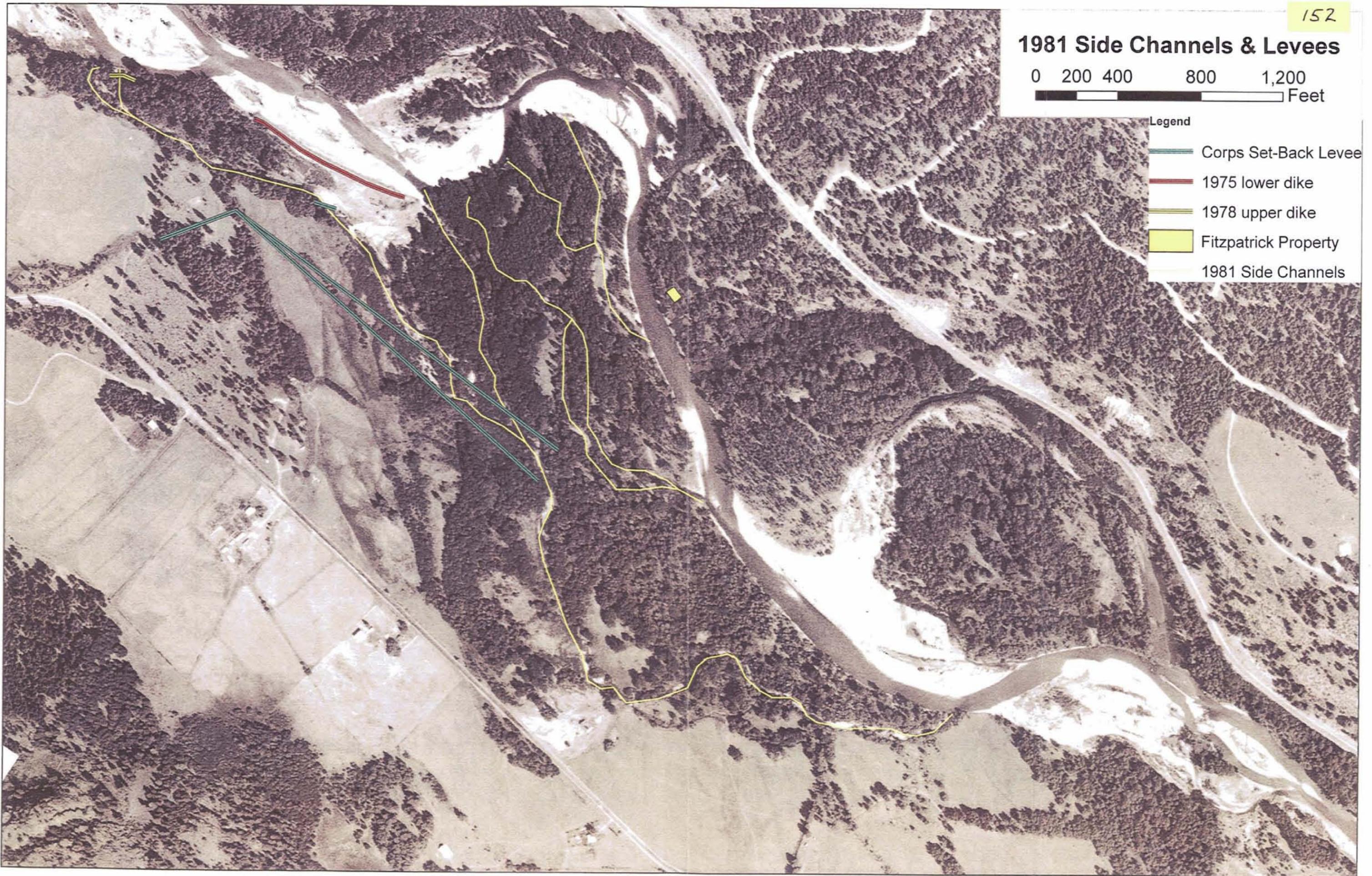
- Legend
-  Fitzpatrick Property
 -  1966 Side Channels



1981 Side Channels & Levees



- Legend
- Corps Set-Back Levee
 - 1975 lower dike
 - 1978 upper dike
 - Fitzpatrick Property
 - 1981 Side Channels



1992 Side Channels & Levees



- Legend
- Corps Set-Back Levee
 - 1975 lower dike
 - 1978 upper dike
 - 1980s upper dike rebuild
 - 1980s lower dike extension
 - 1990s overflow dike
 - Fitzpatrick Property
 - 1992 Side Channels



2000 Side Channels & Levees



- Legend
- Corps Set-Back Levee
 - 1975 lower dike
 - 1978 upper dike
 - 1980s upper dike rebuild
 - 1980s lower dike extension
 - 1990s overflow dike
 - 1999 corps dike rebuild
 - Fitzpatrick Property
 - 2000 Side Channels



2004 Side Channels & Levees



- Legend
- Corps Set-Back Levee
 - 1975 lower dike
 - 1978 upper dike
 - 1980s upper dike rebuild
 - 1980s lower dike extension
 - 1990s overflow dike
 - 1999 corps dike rebuild
 - Fitzpatrick Property
 - 2004 Side Channels

