STATE OF FLORIDA
DIVISION OF ADMINISTRATIVE HEARINGS

JOYCE (JOY) E. TOWLES CUMMINGS, ET AL.,	)	
Petitioners,	)	
vs.	)	Case Nos. 97-0692
	)	97-0930
STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL PROTECTION, and BUCKEYE FLORIDA, L.P.,	)	97-1449
Respondents.	)	

RECOMMENDED ORDER

Pursuant to notice, Administrative Law Judge Don W. Davis, duly designated by the Division of Administrative Hearings, held a formal hearing in the above-styled case on July 7-10, 1997, in Perry, Florida. The following appearances were entered:

APPEARANCES

For Petitioner Sharon Cutter:

Sharon Cutter, pro se
Route 1, Box 1130
Perry, Florida 32347

For Petitioners Ronnie Edwards, Rebecca Edwards, and Mitchell Edwards:

Ronnie Edwards
Rebecca Edwards
Mitchell Edwards, pro se
Route 1, Box 160
Perry, Florida 32347

For Petitioner Joyce T. Cummings:

No Appearance

For Respondent Department of Environmental Protection:

Lynette L. Ciardulli, Esquire
Jennifer L. Fitzwater, Esquire
Department of Environmental
Protection,
2600 Blair Stone Road
Tallahassee, Florida 32399

For Respondent Buckeye Florida, L.P.:

Terry Cole, Esquire
Pat Renovitch, Esquire
Post Office Box 6507
Tallahassee, Florida 32314-6507

STATEMENT OF THE ISSUE

Whether Respondent Buckeye Florida L.P., (Buckeye), has provided reasonable assurances to Respondent Department of Environmental Protection (Department) that construction activity for the proposed project will comply with applicable provisions of Chapter 373, Florida Statutes, and related administrative rules.

PRELIMINARY STATEMENT

Buckeye filed an application with the Department for a permit to construct a pipeline, conveying treated effluent from the current discharge point near Buckeye's pulp mill in Perry, Florida, to a discharge point in the estuary of the Fenholloway River. Subsequently, the Department issued its Notice of Intent to permit the proposed project on December 31, 1996.

Between February 10-27, 1997, the Department forwarded the Petitioners' challenges to the Division of Administrative Hearings for conduct of formal administrative proceedings.

The cases of the various Petitioners were consolidated by order issued March 31, 1997, and, following one continuance, the matter was set for final hearing to be convened on July 7, 1997.

At the final hearing, Petitioners presented testimony of eight witnesses and six exhibits. Respondents presented nine witnesses and 25 exhibits. Petitioner Cummings did not appear at the final hearing and no evidence was presented on her behalf.

Upon commencement of the final hearing, the Petition of Cummings was dismissed upon motion of Buckeye. Petitioner Cummings was the only party who challenged the construction variance related to the proposed permit and was also the only party who asserted that closed loop technology should be considered. The parties stipulated that these matters were no longer at issue.

The transcript of the final hearing was filed with the Division of Administrative Hearings on August 11, 1997. Petitioners requested, and were granted, leave in excess of ten days of the transcript's receipt in which to file proposed findings of fact. Proposed findings submitted by the parties have been utilized in the preparation of this Recommended Order.

FINDINGS OF FACT

The Parties

1. Petitioner Sharon Cutter lives in Taylor County, Florida. Her home is about two miles south of the closest point of the pipeline project.

2. Petitioners Ronnie, Rebecca, and Mitchell Edwards also reside in Taylor County. Their home is about two miles north of the closest point of the pipeline project.

3. The Department is the state agency that reviewed Buckeye's application for the proposed permit and issued notice of intention to permit the construction activity.

4. Buckeye is the applicant for the proposed permit. Since 1993, the Florida limited partnership has owned and operated a softwood dissolving kraft pulp mill in Taylor County, southeast of Perry.

BACKGROUND

Mill Operation

5. Two stand-alone pulp manufacturing lines at the mill in Perry daily produce about 1200 tons of cellulose. The first line manufactures unique and highly specialized products used in meat casings, rayon tire cord, rayon textile filament, pharmaceuticals, rocket propellants, cellulose ethers for food, and a variety of other products. The second line manufactures fluff pulp for the disposable diaper industry, a specialty product.

6. The mill directly employs about 825 people. In economic terms, the mill pays about $40 million annually in salaries and has an overall annual regional impact of approximately $180 million.

7. The mill’s wastewater system captures effluent from the

manufacturing process and includes 150 acres of aerated and treatment lagoons. This system is common in terms of its use in the industry.

8. The mill discharges about 50 million gallons daily (MGD) of treated effluent from an aeration pond into the Fenholloway River near the river crossing of U.S. Highway 19, approximately 24.6 miles upstream from the Gulf of Mexico.

9. Headwaters of the 27-mile Fenholloway River originate in the San Pedro Bay at 100 feet above sea level. The river generally runs from east to west through Taylor County to the Gulf of Mexico at sea level. The major freshwater input to the Fenholloway River below the current discharge point is Spring Creek at mile point (MP) 13.6. The river is tidally influenced and subject to salt water influence to about MP 3.5, and would not be affected by reductions in flow from the current discharge point.

History of the Fenholloway River

10. Buckeye's discharge of treated industrial wastewater to the Fenholloway River is regulated by state and federal permits. The river has traditionally been a Class V (industrial use) water body.

11. A use attainability analysis is required by the Clean Water Act every three years for any waterbody that is not at least Class III (possible to use for recreation, propagation, and maintenance of a healthy, well-balanced population of fish and

wildlife). The purpose of this analysis is to determine if Class III uses are attainable, considering economic, technological, and social factors. Historically, use attainability analyses have primarily focused on changes in the manufacturing process, as well as any modifications to the treatment of the wastewaters.

12. In 1991, the Department began a use attainability analysis on the feasibility of reclassifying the Fenholloway River from Class V to Class III. The three-year analysis was completed in 1994 and indicated that Class III (fishable and swimmable) designated uses and water quality criteria in the Fenholloway River were technologically and economically feasible through installation of technologies, involving mill changes, to reduce pollutant generation. The technologies also include construction of a pipeline to an area downstream where more dilution of Buckeye's discharged waste water will be available. Additionally, the technologies include augmentation of natural flow of the river with mitigative measures at the river headwaters. Under these plans, the pipeline would remove the mill discharge from about 20 miles of the river.

13. Specifically, three major elements in the completed use analysis are change in the manufacturing process to reduce the color of the effluent by 50 percent; relocation of the discharge point from its present location to a location 1.7 miles upstream from the mouth of the river where there is more assimilative

capacity and dilution; and restoration of portions of the 7,000-acre San Pedro Bay to wetlands by construction of a water control structure.

14. As a result of the completed 1994 Use Attainability Analysis, the Environmental Regulation Commission (ERC) voted on December 15, 1994, to repeal the Class V designation of the Fenholloway River. The reclassification decision designating the river as a Class III water body is effective December 31, 1997.

15. The action of the ERC was subject to review by the United States Environmental Protection Agency (EPA). Upon review, the EPA approved the change after concluding that Class III water standards could be attained with implementation of the proposed pipeline and restoration of portions of San Pedro Bay wetlands through construction of a water control structure. The EPA also concluded that "the only other alternative that would result in the attainment of Class III standards would also have widespread economic and social impacts, i.e., closure of the mill."

16. The Department and Buckeye executed the Fenholloway River Agreement on March 29, 1995. In that agreement, the parties set forth steps and schedules necessary to achieve standards required for reclassification of the Fenholloway River to a Class III water body. The agreement was publicly noticed and was not challenged by anyone.

Permit Application

17. Buckeye applied for the proposed permit on August 31, 1995, in accordance with the terms of the Fenholloway River Agreement. The Department then requested and received additional information from Buckeye. Thereafter, on December 31, 1996, the Department notified Buckeye of its intention to issue the proposed permit.

18. Buckeye has applied for other authorizations and permits that are required from the Department for the pipeline project, but which are not part of this proceeding. For example, Buckeye applied for an easement from the state for private use of sovereignty submerged lands and an operation and discharge permit for its wastewater treatment system.

Pipeline Project

19. Buckeye proposes to construct a 15.3-mile underground, linear pipeline from the mill (MP 24.6) in Perry to an underwater discharge point (MP 1.7) in the Fenholloway River. The project also includes a water control structure in the San Pedro Bay, an effluent pump station at the Perry mill, an oxygenation facility near the end of the pipeline, and an outfall diffuser structure at the discharge point.

20. The pipeline route is 80,200 feet long. It was selected over alternative routes to minimize environmental impacts. The river crossings are underground primarily to minimize water quality impacts during construction.

21. The underground pipeline will be constructed from 20-

foot sections of semi-flexible ductile iron pipe manufactured by the American Cast Iron Pipe Company in Birmingham, Alabama. The sections will be connected with flexible joints. Most of the pipeline will have 30 inches of earth over it; however, the pipe is strong enough to support 20 feet of earth. At the underground river crossings and outfall/diffuser area, the pipe will have five feet of earth over it.

22. The ductile iron pipe is 60 inches in diameter and 1/2 inch thick. The pipe is lined with 1/4 inch thick cement to prevent internal erosion and wrapped with polyethylene (double wrapped for the last 9000 feet of wetlands) to prevent external corrosion. The treated effluent that will flow through the pipe is an easy material to handle from a corrosion viewpoint, as it is a weak and stable effluent, similar to water. Ductile iron pipe is routinely used to transmit raw sewage.

23. The diffuser will be made of concrete pipe, with a steel core and wrap wires around it, since the durability of concrete is proven in a saltwater environment. At the outfall/diffuser, the river is about 700-900 feet wide and 8 to 11 or 12 feet deep (low to high tide).

24. The maximum working pressure in the pipeline will be 50-60 pounds per square inch (psi). The ductile iron pipe is rated at 150 psi.

25. The pump station will have capacity to transmit about 76 million gallons of treated effluent per day. The pipeline is

capable of receiving up to 100 MGD of the type of treated effluent now discharged by the mill.

26. Presuming correct installation, the pipeline will not leak or crack. It will be tested for water tightness before, during, and after construction.

27. Monitoring of the pressure in the pipeline will occur at the effluent pump station near the mill. Any significant change in pressure will activate an alarm system. The mill can immediately shut off the pumps.

28. The pipeline meets all industry standards and should last well over 100 years. The concrete diffuser may have to be replaced every 10-20 years, but there is easy access for replacement.

29. Test borings along the pipeline route have revealed no sinkholes. If sinkholes are encountered during construction, they will be filled before the pipe is installed. The predominant type of sinkholes that could develop after installation are doline or solution sinks. They typically settle at a rate of 1 foot every 5,000-6,000 years. The pipe and flexible joints (which flex 12 inches) will easily tolerate this minimal movement.

30. The diffuser has 20 ports, spaced five feet apart which can be rotated based on desired direction of discharge. Some will face upstream and some downstream to ensure good mixing of the treated effluent and river water. At mean low water, there

will be about six feet of clearance above the ports. When the plume from the ports reaches the surface, it will have a ripple of about a quarter of an inch. The ripple will not impact a canoe. The closest port to the west bank is 25 feet, but due to the angle of that port, effect of any discharge from that port will be 73 feet from the bank.

31. The contractor selected to construct the pipeline is believed to have an outstanding reputation for construction projects similar to this one. Buckeye will accept responsibility for the pipeline and implement its usage only after extensive tests (culminating in final hydrostatic testing), assuring that construction meets all requirements of the proposed permit and industry standards.

32. Buckeye will operate, maintain, and inspect the pipeline and related facilities once they are completed, using acceptable
management practices. Coverage will be seven days a week, the same as for the mill facility at present.

33. Cleaning the pipe will be a mechanical process, not using cleaning agents. Barnacles will not be a problem due to the constant flow in the pipe.

Water Quality Standards

34. Buckeye will meet all water quality standards, except for turbidity during construction at the two river crossings and outfall/diffuser. A variance for turbidity at these three

locations during construction was requested by Buckeye and approved by the Department. The only challenge to that variance has been dismissed.

35. Buckeye will minimize turbidity during construction by using a series of best management practices. For example, Buckeye will use silt curtains, silt fences and filtration bags. As a consequence, turbidity will be minimal, temporary in nature and negligible.

36. The technologies which Buckeye will employ is expected at this time to improve the water quality in the river, estuary and Gulf.

Environmental Impacts

37. Buckeye provided reasonable assurance to the Department that construction of the proposed pipeline project will not adversely affect the public health, safety, welfare, or property of others. Overall, the proposed project will positively affect the public health, safely, welfare, and property of others.

38. There is no risk to humans and ecological receptors that may be associated with metals or dioxin in river sediments.

Conservation

39. There are no threatened or endangered wildlife species that will be impacted by the proposed project. The four species of special concern (gopher tortoise, American alligator, eastern indigo snake, and Sherman fox squirrel) in the project area will be minimally affected due to special protection programs and

temporary relocation.

40. The draft permit contains conditions providing for the protection of species of special concern that were recommended by the Florida Game and Fresh Water Fish Commission. The relocation of gopher tortoises and the eastern indigo snake are examples. These conditions are typically used to ensure the protection of species.

41. Buckeye will provide for the protection of manatees that was recommended by the Department's Bureau of Protected Species Management, even though none have been observed in the project area.

42. There will be minimal or negligible effect on the habitat value of fish and wildlife.

Navigation, Erosion or Shoaling

43. At each of the two subaqueous river crossings (upstream at MP 17.8 and MP 24.4), boats will not be able to navigate approximately 100 feet of the river for the six-seven days during construction of the coffer dam structures. However, a canoeist could portage around these sites. Due to tree-falls in this upper reach of the river, portages are required anyway.

44. The permit conditions require Buckeye to work 24-hours per day while constructing the subaqueous river crossings in order to minimize adverse affects to navigation.

45. At the outfall/diffuser area downstream in the estuary, boat traffic will never be prevented from moving up and down the

river. However, it will be slowed or temporarily stopped (no more than 20 minutes during four blasts) during a 30-day construction period. Detonation will be conducted in a manner to reduce total acoustical shockwave. The minimum six-foot clearance above the diffuser ports will not be an impedance to navigation.

46. Presently, there is erosion of the banks at the outfall/diffuser site due to boat wake and tidal influence. The construction of the last 80 feet of the diffuser has the potential of temporarily accelerating this erosion on the west bank of the river by causing boat traffic to be moved closer to that bank during construction. To protect this bank during construction, Buckeye has agreed to place filter fabric overlaid with sandbags on the exposed sections of the bank. This will prevent erosion caused by the construction of the diffuser.

47. The permit requires Buckeye to use the best management practices to control erosion during construction. With those in place, there will be minimal erosion or shoaling during construction.

48. Construction will not adversely affect the fishing or recreational values or marine productivity.

49. The proposed project will not cause adverse water quantity impacts to receiving waters or adjacent lands. It will not cause permanent dewatering.

50. The proposed project will not cause sedimentation

downstream of the outfall/diffuser, decrease the storage of waters, reduce the floodway conveyance, or reduce surface water storage volumes.

Project Nature

51. The project will be permanent. The construction trestle at the diffuser/outfall will be temporary.

52. Most of the impacts of the project to vegetation and wildlife are temporary during construction. Natural revegetation will return most areas to their normal condition.

53. The only permanent impact to wetlands is the loss of 0.39 acres for construction of the oxygenation facility in a river swamp area. In addition, 5.48 acres of forested wetlands will be converted to shrub wetlands condition. These are the only permanent impacts to wetlands associated with the proposed project. Disturbance of wetlands will be minimized.

54. The construction of the proposed pipeline project is expected to take less than one year. All of the necessary easements on private lands have been obtained. Buckeye's requested easements on sovereign submerged land are pending. Buckeye owns all of the other land for the proposed project.

Historical And Archaeological Resources

55. An extensive study of the pipeline corridor by an archeological firm with an excellent reputation reveals that there are no significant archeological sites found along the

corridor. In addition to the study, subsequent examinations of the corridor by state and private archeologists (including underwater explorations by a consultant) confirmed this conclusion.

56. The Department of State has advised the Department that the Buckeye project will not affect any sites eligible for listing in the National Register of Historic Places or any sites of historical or archaeological value. There are 16 possible historical sites along the project route. None are deemed significant or eligible for listing on the National Historic Registry.

57. A study of the San Pedro Bay mitigation area also revealed no significant archeological sites.

58. There is a significant archeological site (site 142) on the west bank of the river near the outfall/diffuser. Neither construction of the pipeline nor discharge of the treated effluent transmitted by the pipeline will impact that site, including the banks, due to the planned erosion control plan.

Wetland Areas Affected

59. The proposed project affects wetlands. However, any impacts to wetlands are sufficiently offset by the proposed mitigation plan in the San Pedro Bay.

Cumulative Impacts

60. There are no significant adverse cumulative impacts

which would result from the proposed project. There is a beneficial cumulative impact in the improvement to the water quality of the river, allowing reclassification of the river from Class V to Class III.

61. Along the pipeline route, there will be no adverse hydrological impact to the wetlands.

62. The removal of Buckeye's treated effluent from the current discharge point near the mill will cause a drop in the surface water elevations of the river's upper reach (above Hampton Springs) by one-half foot, a drop which is not considered significant. Due to tidal effects in the river at the diffuser location, there will be no hydraulic difference at the proposed location of the discharge.

63. Downstream of Spring Creek, the Fenholloway River picks up flow from springs, groundwater, discharge from Spring Creek and tidal effect. There will be no impact on water levels downstream of Spring Creek caused by the relocation of the discharge point from the mill to the estuary, due to these additional flow contributions.

Mitigation Area in San Pedro Bay

64. The proposed permit requires Buckeye to restore 25 acres of drained wetlands in San Pedro Bay included within a 7,000-acre parcel that Buckeye owns. In the past, the area was hydrologically altered due to forestry activities.

65. The San Pedro Bay area is the headwaters of the Fenholloway River. Construction of the proposed water control structure in the part of the Bay that Buckeye owns will rehydrate the area and restore it to natural conditions.

66. Through the development of a computer model of the San Pedro Bay, Buckeye studied how the hydrology and hydraulics in this area would be affected by the proposed water control structure. The model shows that the structure will enable the area to hold more water and return to more natural conditions (to rehydrate the area).

67. The water control structure will reduce the low-flow days in the Main Bay Canal (connecting San Pedro Bay to the mill area). It will not cause flooding or affect any off-site property. It will reduce erosion.

68. The proposed mitigation is sufficient to offset the impacts of the proposed project.

Other Facts Relating to Petitioners

69. Petitioners' properties are located about two miles from any part of the pipeline project. Construction of the pipeline project will have no substantial affect on Petitioners' properties or any other interest of Petitioners which is unique to them to the exclusion of the general public.

70. Petitioners will continue to be able to travel to the river, use their boats on the river, and view the plants and wildlife along the river from their boats. Even during

construction, they will be able to access the river and launch their boats from the Hicks Landing, located on Buckeye property. After construction, they will be able to launch from this site and at Peterson's Landing. Thus, construction of the project will not substantially affect access to the river or uses of the river related to boating activity.

CONCLUSIONS OF LAW

71. The Division of Administrative Hearings has jurisdiction over the parties and the subject matter. Section 120.57(1), Florida Statutes.

Standing

72. In their Amended Petitions, Petitioners state that they submitted their petitions pursuant to Section 120.57(1), Florida Statutes. That statute provides standing to Petitioners in this proceeding only if their "substantial interests will be affected by the proposed agency action." Yet, insofar as real property is concerned, Petitioners do not contend that their real property will be substantially affected by the proposed pipeline project, real property which is at least two miles from any portion of the project.

73. Petitioners have the burden of showing, as a matter of fact, that they have "substantial interests" that will be adversely affected if the Department issues the proposed permit to Buckeye. The purpose of this standing requirement:

> [I]s to ensure that a party has a "sufficient interest in

> the outcome of the litigation which warrants the court's entertaining it," and to assure that a party has a personal stake in the outcome.

Gregory v. Indian River Co., 610 So. 2d 547, 554 (Fla. 1st DCA 1992).

74. The record is devoid of competent, substantial evidence demonstrating that the Department's action in issuing the proposed permit affects any substantial interest of Petitioners which is unique to Petitioners to the exclusion of the general public. Consequently, Petitioners failed to demonstrate any right to a 120.57 proceeding wherein they could challenge Buckeye's entitlement to the proposed permit. See Florida Department of Transportation v. J.W.C. Co., Inc., 396 So. 2d 778, 787 (Fla. 1st DCA 1981)

75. In order to demonstrate that the Department's action affects their "substantial interests," Petitioners must prove the degree and nature of their alleged interests. Agrico Chemical Co. v. Department of Environmental Regulation, 406 So. 2d 478, 482 (Fla. 2nd DCA 1981). To do this, they must demonstrate that they will suffer injury in fact which is of sufficient immediacy to entitle them to a Section 120.57 hearing and that such substantial injury is of a type or nature which the proceeding is designed to protect. Petitioners have not proven standing pursuant to provisions of Section 120.57(1), Florida Statutes.

76. In the course of this proceeding, Petitioners have also disclosed that they rely upon provisions of Section 403.412(5), Florida Statutes, to permit their standing and participation. Section 403.412(5), Florida Statutes, provides:

> In any administrative, licensing, or other proceedings authorized by law for the protection of the air, water, or other natural resources of the state from pollution, impairment, or destruction, the Department of Legal Affairs, a political subdivision or municipality of the state, or a citizen of the state shall have standing to intervene as a party on the filing of a verified pleading asserting that the activity, conduct, or product to be licensed or permitted has or will have the effect of impairing, polluting, or otherwise injuring the air, water or other natural resources of the state. (emphasis supplied).

77. Notably, the Petitioners' entry into the proceeding, pursuant to Section 403.412(5), Florida Statutes, is considered to be in the capacity of intervenors with the implied requirement of an existing controversy. Such a controversy may be considered to exist after an agency has entered, as in this case, an intended decision to grant the requested permit. MANASOTA-88, Inc. v. Department of Environmental Regulation, (Fla. App. 1st Dist. 1983).

78. Although MANASOTA, supra, creates an opportunity for Petitioners to challenge the proposed permit, they must comply with procedures established by Section 403.412(5), Florida Statutes, requiring that any such intervention must be by "verified" petitions. It is observed that Petitioners did not

provide such verified petitions. Consequently, all the Petitions are found to be deficit in that respect and, accordingly, should be dismissed on that basis.

79. Alternatively, if it is assumed that Petitioners have standing, Buckeye has affirmatively provided the Department with the required "reasonable assurance that state water quality standards . . . will not be violated and reasonable assurance that such activity [construction of the pipeline project] . . . is not contrary to the public interest." Section 373.414(1), Florida Statutes; and Rule 62-312.080, Florida Administrative Code.

80. Just as Petitioners are required to offer proof of standing, Buckeye must demonstrate entitlement to the proposed permit by a preponderance of the competent, substantial evidence. See J.W.C., supra. Buckeye has met this requirement.

81. The proof establishes that the proposed pipeline project complies with the applicable surface water quality standards in Rule Chapters 62-302, Florida Administrative Code; and that the proposed project satisfies the "public interest test" of Section 373.414(1)(a), Florida Statutes, as well as related Rules 40B-4.2030 and 40B-400.103-.104, Florida Administrative Code.

82. Finally, Section 373.414(8), Florida Statutes, requires a consideration of the "cumulative impacts upon surface water and wetlands." Respondents demonstrated at hearing that the proposed

project will meet all surface water quality standards, with the exception of turbidity during construction. However, such turbidity during construction is allowed by the temporary construction variance issued by the Department. Consequently, Buckeye has demonstrated compliance with applicable requirements of Section 373.414, Florida Statutes and related rules.

RECOMMENDATION

Based on the foregoing findings of fact and conclusions of law, it is

RECOMMENDED that a final order be entered dismissing all the Petitions and issuing the proposed draft environmental resource permit to Buckeye.

DONE AND ENTERED this 11th day of September, 1997, in Tallahassee, Leon County, Florida.

DON W. DAVIS
Administrative Law Judge
Division of Administrative Hearings
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Filed with the Clerk of the
Division of Administrative Hearings
this 11th day of September, 1997.

ENDNOTES

[1]/ For a site to be significant, it must be eligible to be listed on the National Historic Registry. For an archeological site, that means the archeological site must have contributed in the past or be able to contribute in the future information

significant to the region's prehistory. (Tr. IV at 429 - Hardin; Tr. VI at 626 - Kammerer)

The following procedure is followed to determine if a site is significant: test the site and collect artifact, evaluate the stratigraphy of the site to ascertain if it has been disturbed in the past, examine the collected information to learn the type and time of the site, and determine if the site can provide new information. (Tr. VI at 623-624 - Kammerer)

[2]/ Hydrology is the science involving the calculations or the methods to convert rainfall and distribution of rainfall to a particular runoff or a quantity of water. It takes into account the rainfall distribution, the quantity or rain, the cover of the land that you're looking at, the slope, the topography, and so forth, and converts all of that through systems of known relationship to a runoff quantity. (Tr. II at 209- Vickstrom)

[3]/ Hydraulics is taking a known quantity of water and routing it through structures like bridges or culverts or control structures like weirs or over dam embankments, through ditches, to convert that quantity of water to a flood elevation or a stage. (Tr. II at 209 - Vickstrom)

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NOTICE OF RIGHT TO SUBMIT EXCEPTIONS

All parties have the right to submit written exceptions within 15 days from the date of this Recommended Order. Any exceptions to this Recommended Order should be filed with the agency that will issue the Final Order in this case.