

# THE UNEASY HIERARCHY OF FEDERAL AND STATE WATER LAWS AND POLICIES

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Water allocation in the West is regulated by a volcanic hierarchy of federal and state laws and policies. Eruptions have increased in frequency as states and their citizens lament the increasing control that the federal government has begun to exert over several western river basins pursuant to federal statutes such as the Endangered Species Act.<sup>1</sup> For example, at a recent conference investigating how Columbia and Snake River irrigators can improve habitat for endangered and threatened anadromous fish species, Washington Senator Marilyn Rasmussen, chairwoman of the Senate Agriculture and Rural Economic Development Committee, bluntly asserted that “[t]he federal government needs to butt out – this is our state.”<sup>2</sup>

Such assertions deserve profound scrutiny because of the frequency with which they are expressed in regional public water policy meetings; the influential positions of state officials who adhere to them; and most importantly, the barriers they create between federal and state officials in several ongoing cooperative attempts to resolve the serious environmental problems vexing the region. Accordingly, we consider why the federal government has intervened in water policy (an area typically perceived to be within the purview of states), and explore the parameters of actual and potential federal intervention. We also examine the problems with relying on traditional state policy to

allocate water among competing private and public uses in the modern era without continued federal intervention.

## **FEDERAL INTERVENTION IN STATE WATER ALLOCATION POLICY**

The federal government has intervened in state water policy to finance large-scale water projects, secure water legislatively earmarked for Indian reservations, protect public water uses, determine the constitutionality of state restrictions on interstate water transfers, and resolve interstate water disputes. These functions often have been undertaken in response to either a state request or a federal obligation to protect public interests neglected in state water allocations.

### Federal Water Development

States traditionally accommodated increased demands for water by expanding supplies (Gould 1988). Water development took the form of dams, associated water impoundment reservoirs, and long-distance canal systems. The expense of such major development went beyond the financial capabilities of individual farmers, cooperative associations of farmers, and the governments of small western states and territories. Moreover, private investment companies generally viewed such projects as overly risky and capital-intensive. Consequently, western

interests successfully lobbied the federal government to finance western water development with terms provided in a series of reclamation acts beginning in 1902. The controversy over whether the federal government or the states would control the federally-developed water crystallized early. State interests contended that:

“[T]he federal government was welcome, indeed morally obliged, to fund reclamation in the West. Control over water, however, would remain with the western states. Bernard DeVoto described the unreconstructed, states-rights sentiment that would guide western attitudes toward the federal government, water, and reclamation during the twentieth century: “Get out and give us more money” (Wilkinson 1992, p. 245; DeVoto quote from Stegner, 1987, p. 9).”

The 1902 Act satisfied the states’ desire for control of federally-developed water by deferring to state water law, thereby ensuring that the water would be allocated subject to the prior appropriation doctrine. However, state control of this water was not unrestricted. Terms provided in the 1902 and subsequent reclamation acts imposed restrictions on water and land use to protect federal financial and social interests in project water. For example, to spread the benefits of project water widely among resident farmers, the 1902 Act limited each landowner receiving federally subsidized water to 160 owned acres within the project area and required each to reside on or near his land. To counter later circumvention of the owned acreage restriction by large scale leasing of farmland in project areas, the Reclamation Act of 1982<sup>3</sup> increased the acreage restriction to 960 acres, but included leased land in this total for the first time.

#### Federal Protection of Interests Neglected by States

States applied their prior appropriation water allocation systems<sup>4</sup> to lock available water into irrigated agriculture without regard for federal water rights reserved to Indians or for public interests in water.

In *Winters v. United States*,<sup>5</sup> the Supreme Court held that when the federal government established Indian reservations it reserved the quantity of water needed to fulfill the purposes of the reservation. Neither state nor federal officials protected *Winters* rights as water was being fully appropriated into state water systems:

“ . . . state officials effectively read *Winters* out of existence through a business-as-usual approach of granting state water rights and allowing diversions that directly conflicted with Indian

rights. Federal officials, supposedly bound to act as trustees for Indian rights, were, if anything worse. They pushed for federal subsidies for non-Indian projects on Indian rivers and ignored potential Indian projects” (Wilkinson 1992, p. 268).

*Winters* rights date back to the legal action establishing the reservation. Because reservations predate many non-Indian settlements, *Winters* rights often have seniority when enforced against rights perfected under state laws of prior appropriation. Moreover, *Winters* rights are not subject to forfeiture for non-use under state prior appropriation laws, and so do not lose their seniority when finally enforced. Consequently, modern day enforcement of *Winters* rights has cast serious clouds over state water rights, especially those in the most fully appropriated basins.

In an attempt to resolve the fear and uncertainty surrounding unused or unsettled *Winters* rights, states and tribes have enlisted the aid of the federal government to negotiate a series of formal settlements quantifying *Winters* rights and restricting state water allocations accordingly. Congress has ratified at least fifteen such settlements since 1982 (Hare 1996). Some significant features characterizing these settlements are: (1) a tribe can market Indian water off-reservation subject to state water law (e.g., Fallon Paiute-Shoshone Tribe settlement in Nevada); (2) a tribe settles for less than potential *Winters* entitlement in exchange for avoiding potential litigation and settling past claims (e.g., Fort McDowell Indian Community settlement in Arizona), or receiving a permanent supply at an earlier date (e.g., Jicarilla Apache Tribe settlement in New Mexico); (3) a tribe agrees to subordinate some portion of its *Winters* rights to avoid disrupting a state’s prior appropriative water allocations (e.g., Colorado Ute Indian settlement in Colorado); and (4) a tribe receives economic development fund for use on the reservation (e.g., Truckee-Carson-Pyramid Lake settlement in Nevada) (Hare 1996).

Similar to *Winters* rights, public interests in water were not protected as water was being fully appropriated into state water systems. For example, nondiversionary uses, such as maintaining instream flows for fish and wildlife habitat, were not traditionally viewed as beneficial uses, and thus did not qualify for water under state appropriation doctrines. Consequently, traditional appropriative right holders could “with impunity . . . literally dry up streams, as . . . happened with some regularity” (Wilkinson 1992 p. 21).

In the last few decades, states have begun to recognize instream flow protection as a beneficial use, and have legislated procedures to establish instream flow rights. However, these procedures generally are fraught with restrictions that frustrate the transfer of appropriated water,

or the dedication of any remaining unappropriated water, to instream use (Huffman 1983; Benson 1998). For example, Nebraska law prohibits the transfer of water from one use (e.g., agriculture) into another (e.g., instream flow),<sup>6</sup> and the states of Idaho, Oregon, and Washington authorize only state agencies (subject to the considerable influence of politically powerful user groups) to dedicate unappropriated water to instream flows.<sup>7</sup> Private citizens in these states are not authorized to purchase water rights for the enhancement of instream flow. Moreover, water rights recently dedicated to instream flow enhancement by state authorities are subordinate in priority to traditional appropriative rights, which allows the latter rights to continue dewatering rivers during times of water scarcity.

Public interests in water have received their best protection through federal statutes such as the Endangered Species Act and the Clean Water Act.<sup>8</sup> The extent to which these environmental statutes authorize the federal government to disrupt state-created water rights is controversial. At one extreme, some commentators believe that such statutes create “federal regulatory rights” by empowering the federal government to “cancel the historic de facto assignment of property rights in commons to exploiters and reassign them to the government as agent for the public generally” (Tarlock 1985, p. 3). At the other extreme, some federal courts have held that the federal government must defer to state-created water rights in the absence of explicit congressional intent to preempt them.<sup>9</sup> Despite this controversy, the supremacy clause of the U.S. Constitution<sup>10</sup> clearly empowers Congress to preempt state water rights by federal statute if it so chooses.

### Federal Constitutional Concerns

The federal government also has intervened in state water policy when a state law encroaches on powers delegated to the Congress by the U.S. Constitution, or when the resolution of interstate water disputes requires constitutionally mandated federal consent.

The Commerce Clause<sup>11</sup> of the U.S. Constitution provides that “[t]he Congress shall have the Power . . . [t]o regulate Commerce . . . among the several States.” The U.S. Supreme Court (Supreme Court) has held that this express grant of congressional power also implicitly restricts state power to impose undue burden on interstate commerce. This implicit restriction is referred to as the “dormant commerce clause.” The Supreme Court is the final arbiter regarding the consistency of state laws with the dormant commerce clause.

State laws restricting the export of instate water resources have aroused Supreme Court scrutiny under the dormant commerce clause. In *City of Albus v. Carr*,<sup>12</sup> the Supreme Court resolved that groundwater is an article of commerce subject to scrutiny under the Commerce Clause, and struck down a Texas law forbidding the interstate exportation of groundwater without legislative approval as an impermissible burden on interstate commerce. In *Sporhase v. Nebraska*,<sup>13</sup> the Supreme Court formulated its two-pronged procedure for determining the constitutionality of interstate water export statutes. A statute found to be “facially” discriminatory (i.e., one explicitly banning interstate commerce) is subjected to the Supreme Court’s strictest scrutiny requiring that the state prove that the statute serves a legitimate state purpose, that it is narrowly tailored to that purpose, and that no adequate less-discriminating alternatives exist. Nebraska’s “reciprocity” statute (requiring that the importing state’s law would need to grant reciprocal rights to export its groundwater for use in Nebraska) failed to pass this test, and thus was found to be an unconstitutional burden on interstate commerce. Alternatively, a state statute not found to be facially discriminatory is subjected to lesser scrutiny requiring that the Supreme Court find that it strikes a permissible balance of federal and legitimate state interests. Nebraska’s “finding” statute (requiring that the withdrawal of the groundwater to be exported be reasonable, not contrary to conservation, and not detrimental to the public welfare) passed constitutional muster on this basis.

The above line of decisions has elicited strategic behavior on the part of states attempting to improve their chances of successfully defending restrictions on interstate water exports against constitutional challenge. One such behavior is to restrict intrastate water transfers to a similar extent as interstate transfers. The underlying legal reasoning seems to be that a state cannot be found to unconstitutionally discriminate against out-of-state water transfers if it imposes similar restrictions on in-state transfers. The opportunity cost of this behavior is that the state foregoes the gains from trade resulting from beneficial intrastate water transfers. The *Sporhase* decision does not offer great hope that such behavior will salvage an otherwise impermissible restriction on interstate trade. Since blatant protectionism is not a legitimate state interest for a water export statute, a state generally will specify water conservation as the desired objective. The Supreme Court will require that the restriction operate evenhandedly by dividing the burden of conservation equally between in-state and out-of-state users. However, as demonstrated in *Sporhase*, the key to this determination is whether the state similarly restricts in-state water use (e.g., groundwater pumping) – not whether the water once extracted can be traded in-state.

States also defend or implement protectionist water policies on the grounds that such policies are required for states to satisfy their obligations under interstate water compacts. An interstate water compact is a negotiated agreement between two or more states regulating the allocation of water, water quality, flood control, etc., among the states. The most common are water allocation compacts, of which there are 21 among the western states (Bennett). The Supreme Court has stated that “[t]he compact . . . adapts to our Union of sovereign states the age-old treaty-making power of independent sovereign nations.”<sup>14</sup> The federal government’s involvement is mandated by the Compact Clause<sup>15</sup> of the U.S. Constitution which requires Congressional consent to interstate compacts. After Congressional consent, the compact is considered to be federal law not subject to Commerce Clause restrictions.<sup>16</sup>

A line of defense for states whose water laws restricting interstate commerce are constitutionally challenged in federal courts has been to demonstrate that the laws are required for the states to satisfy an interstate water compact. In response to Nebraska’s attempt to defend its reciprocity restriction on this basis in *Sporhase*, the Supreme Court held that Congressional intent to remove state water law from scrutiny under the Commerce Clause must be expressly stated in the compact. The subsequent case of *City of El Paso v. Elephant Butte Irrigation District*<sup>17</sup> demonstrated that federal courts would rely on an extremely literal reading of compacts to ensure that Congress clearly intended to shield state water law from Commerce Clause scrutiny.

States also may implement protectionist water policies by manipulating their obligations under interstate water compacts. While market transfers of water rights between two states may not be explicitly prevented, an interstate compact specifying the water quantity obligation of the upstream state to the downstream state may provide an institutional means to restrict and effectively prevent interstate water transfers. Consider a simple example. Assume that A (a citizen of the upstream state) sells B (a citizen of the downstream state) 10 units of water. Assume further that the upstream state counts the 10 units that A sells to B as part of the water it is legally obligated to deliver to the downstream state under compact. Citizen A satisfies her obligation to B by reducing her water use by 10 units. The upstream state, by maintaining compact quantity interstate deliveries, now has 10 additional units of water that it can reallocate within the state, leaving the downstream state to satisfy the 10 units of water purchased by B out of the existing compact allocation. With no additional water delivered, the

downstream state will not acknowledge the water right transfer or deliver water to B, thereby effectively preventing this and future interstate transfers.

The above two “interstate compact” strategies will come under increasing federal scrutiny if states apply them to frustrate cooperative federal-state efforts to increase instream flows for endangered wildlife. The Cooperative Agreement for Platte River Research (1997), entered into by the Governors of Colorado, Nebraska, and Wyoming with the U.S. Secretary of the Interior (Secretary), provides an interesting example. Under threat of direct federal intervention, and as part of a program to improve habitat for four endangered species, the three states have agreed to develop and implement programs to increase instream flows at specified times of the year in central Nebraska by 130,000 to 150,000 acre feet per year. Although private interstate water transfers are among several alternatives being considered to increase instream flow in the target area in a consulting report conducted for the Cooperative Agreement’s Governance Committee (Boyle Engineering Corporation), such transfers will be adjudged, or effectively rendered, infeasible to the extent that federal regulators allow the cooperating States to pursue the “interstate compact” strategies.

## **THE JUSTIFICATION FOR CONTINUED FEDERAL INTERVENTION**

Ironically, much of the federal intervention in state water management has been at state request to finance water expansion projects or to mediate settlements with groups whose prior rights were not respected by state prior appropriation systems. The federal government also has intervened to enforce constitutional strictures against state imposed restrictions on interstate commerce in water, and to perform its constitutional duties to consent to interstate compacts (Congress) or equitably apportion interstate water resources among states (Supreme Court). The era of federally-financed large-scale water development is over (Gould 1988), but the other justifications for federal intervention will persist because *Winters* rights disputes have not been completely settled and the federal government cannot abandon its responsibility to ensure that state water laws and interstate agreements are constitutional.

The federal government likely will intervene most heavily in the recovery and protection of water-reliant species listed as threatened or endangered pursuant to the Endangered Species Act.<sup>18</sup> Federal recovery plans might require that legal precedence be given to the instream flow needs of these species over the traditional appropriations of state water right holders at critical times and locations. The possibility that the federal government might directly intervene in the allocation of in-state water resources to

protect instream flows is resented by western states and traditional water right holders who view the prior appropriation doctrine as the rightful center of the water allocation universe.

Can the prior appropriation doctrine reasonably be expected to meet the modern-day challenge of allocating water among competing private and environmental uses if the federal government were to “butt out”? Unfortunately, past performance does not offer great hope that state prior appropriation systems across the West will be equal to this challenge in either theory or practice because of the following problems:

1. **Junior Priority of Instream Flow Rights.** Instream flow rights recently established under the purview of state prior appropriation systems are junior in priority to the appropriative rights previously locked into irrigated agriculture. Consequently, instream flow rights have the highest likelihood of not filling when most needed to protect fish and wildlife habitat during severe water shortages in fully appropriated river basins.
2. **Noncompliant Water Users.** Instream flow rights are imperiled by wide ranging extractive activities that are noncompliant with rights established under prior appropriation, and are allowed to continue unabated by state water officials. For example, environmental groups are pursuing legal action against the State of Washington to force the State’s Department of Ecology to ban noncompliant groundwater withdrawals (i.e., groundwater pumped beyond levels specified in water rights) because of their detrimental impact on streamflows (Spokane Spokesman Review 1999). In another example, a 1993 survey found that over 500 users (mostly irrigators) were taking water without a valid right in Whatcom County, Washington. State water officials not only did not take meaningful enforcement action against the violators, but the 1997 Washington Legislature approved a bill (later vetoed by the Governor) that would have legalized these invalid uses (Benson). State efforts in identifying, ascertaining, and stopping noncompliance are plagued within each state by inadequate budgets (Spokane Spokesman Review 1999), and West-wide by inconsistent enforcement policies across states. For example, the Idaho State Supreme Court held that the state water agency has a mandatory duty to curtail noncompliant water use to protect senior appropriators,<sup>19</sup> whereas the Washington State Supreme Court held that the state agency had no such authority.<sup>20</sup>
3. **Technological Change in Agriculture.** The security of instream flow rights also has eroded in the face of gradual and widespread improvements in on-farm irrigation efficiency.<sup>21</sup> Because improved technologies commonly require less than one-half of the original water duty to achieve increased levels of consumptive water use in crop production, efficiency-improving irrigators contend that the unused portion of the original water duty represents conserved water that they can spread over land nonappurtenant to the original right (i.e., water spreading) or sell to others without impairing other water rights. However, basic hydrologic principles indicate that not only is no additional water created when irrigation efficiency is increased in the return-flow hydrologic systems characterizing the West, but more water is consumed at the intensive and extensive margins of use (Huffaker and Whittlesey 1995). States mistakenly allowing efficiency-improving irrigators to retain some fraction of the unused portion of their water duty as conserved water (e.g., Oregon<sup>22</sup>) unintentionally permit these irrigators to enlarge their uses at the expense of public efforts to increase streamflows for fish and wildlife.
4. **Inflexibility of Prior Appropriation.** The junior priority of instream flow rights would not be a major problem if state prior appropriation systems were sufficiently flexible to allow water transfers from traditional to instream uses. Indeed, economists have demonstrated that shifting water from irrigation to hydropower production in the Pacific Northwest would generate benefits ten times greater than lost farm income, and two times greater if the flows were shaped specifically to meet the migratory needs of endangered fish species (Hamilton and Whittlesey 1992). Unfortunately, the transfer of diversionary rights can breach the security of use-dependent rights by changing the timing, quantity, and quality of return/escape flows. States protect appropriators from such breach, and protect agricultural water supplies, by imposing moderate to severe limits on water transfers (Gould 1988). For example, Idaho does not allow transfers that “would significantly affect the agricultural base of the local area,”<sup>23</sup> and, as mentioned above, Nebraska does not permit transfers from agriculture into another use. Such protective efforts have been identified as the principal deterrent to the development of water markets within the framework of the prior appropriation system (Perala and Benson 1995).
5. **Reticence to Use Alternate Legal Authority to Strengthen Instream Flow Rights.** An appropriative water right grants the owner the right to use publicly owned water. As owner of the water itself, the public reserves the right to condition private water use so that

it is consistent with public values, and western states do this to a limited degree in their water statutes (Wilkinson 1992). The public trust doctrine<sup>24</sup> provides states with an additional source of legal authority for conditioning appropriative water rights to the degree needed to protect public resources. This could entail rejecting applications for new appropriations that would harm trust values, and continually supervising and regulating existing rights to ensure continuing compatibility. The extent to which states have applied the public trust doctrines to condition appropriative water rights differs significantly across the West. At one extreme, the California Supreme Court held that the public trust doctrine allows the state to reconsider past water allocation decisions and requires a balancing of public and private needs in water.<sup>25</sup> At the other extreme, an Idaho statute precludes the application of the public trust doctrine in conditioning water rights.<sup>26</sup>

## CONCLUSION

The common assertion that the federal government should “butt out” of state water policy has little justification. The federal government continues to have a number of legitimate reasons for intervention in state water policy. It must protect its financial interests in a number of large-scale water projects built at state request, satisfy its constitutional obligations to protect interstate commerce in water and oversee interstate compacts and equitable apportionments, and satisfy its statutory and public trust obligations to protect water uses traditionally neglected by states (e.g., Indian water rights and environmental uses). Federal intervention to protect aquatic ecosystems is especially justified because of intrinsic shortcomings in the theory and application of state prior appropriation systems in providing such protection and the reticence of states to appeal to alternative legal doctrines better suited to the purpose.

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## ENDNOTES

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<sup>1</sup> 16 U.S.C. §1531-1543 (1982)

<sup>2</sup> Associated Press, "Agribusiness looks to win support on water, fish issues." Moscow-Pullman Daily News, Weekend, November 27 & 28, 1999, p. 4C.

<sup>3</sup> 43 U.S.C. §390 (1982).

<sup>4</sup> The prior appropriation doctrine is an outcropping of nineteenth century western mining law that extended the allocation rule of "first in time, first in right" to surface water resources. Briefly, a person attains a user's (usufructory) right to the quantity of public water that is diverted to a beneficial use on a fixed tract of appurtenant land. The priority of the right extends back to the time of first diversion. The "water duty" for the right is measured on an acre-feet of water per acre basis, and comprises the quantity of water sufficient to irrigate an average mix of crops on the appurtenant acreage with the irrigation technology prevailing when the water right was granted. Water that is not beneficially used is forfeited and available for re-appropriation by another person (use it or lose it).

During times of water scarcity, senior appropriators (i.e., those with the longest-term rights) receive their full entitlements until the water source is completely depleted. More junior appropriators receive no water at all. Junior appropriators are protected from enlargement of senior rights because senior appropriators desiring to expand their diversionary rights beyond the original water duty must execute a new appropriation having the most junior priority. Because not all water diverted from the stream (diversion) is consumed in irrigation (consumptive use), the unconsumed portion can return to the stream as surface runoff or as underground spring flow after deep

percolation to an underlying aquifer (return flows), or escape by the same means to a second water course (escape flows). Downstream appropriators rely on return/escape flows to supply, along with natural flows, a portion of their water rights.

By the early twentieth century, many western states had adopted formal administrative permit procedures designed to consolidate historic water rights, provide for the orderly creation of future rights, and provide for the oversight needed to enforce appropriative water law. Under these procedures, a person desiring to execute a new appropriation must apply to the state which determines whether sufficient water is available to fund the new right without harming senior appropriators, and establishes the conditions of use [See, e.g., Hutchins, 1971].

<sup>5</sup> 207 U.S. 564 (1908).

<sup>6</sup> R.R.S. Neb. §46-294(2).

<sup>7</sup> Idaho Code §§42-1501,1503; Or. Rev. Stat. §537.336; Wash. Rev. Code §§90.03.247, 90.22.010.

<sup>8</sup> 33 U.S.C. §1344 (1982).

<sup>9</sup> See, e.g., California v. U.S., 438 U.S. 645 (1978).

<sup>10</sup> U.S. Const., art. VI, cl. 2.

<sup>11</sup> U.S. Const., art. I, §8, cl. 3.

<sup>12</sup> 385 U.S. 35 (1966).

<sup>13</sup> 458 U.S. 941 (1982).

<sup>14</sup> Hinderlider v. La Plata River & Cherry Creek Ditch Co., 304 U.S. 92, 58 (1938).

<sup>15</sup> U. S. Const., art. I, §10, cl. 3. "No state shall, without the consent of Congress . . . enter into any agreement or compact with another state, or with a foreign power . . ."

<sup>16</sup> Intake Water Company v. Yellowstone River Compact Commission, 590 F. Supp. 293 (1983).

<sup>17</sup> 563 F. Supp. 379 (1983).

<sup>18</sup> For example, the U.S. Secretary of the Interior recently entered into a cooperative agreement with the states in the Platte River Basin (Nebraska, Colorado, and Wyoming) to develop and implement a long-term recovery program to aid four threatened or endangered species listed under the ESA.

<sup>19</sup> Musser v. Higginson, 871 P. 2d 809 (Idaho 1994).

<sup>20</sup> Rettkowski v. Department of Ecology, 858 P.2d 232 (Wash. 1993).

<sup>21</sup> On-farm irrigation efficiency is calculated as the ratio of the water stored in the crop root zone for consumptive use to the total water diverted for irrigation.

<sup>22</sup> Or. Rev. Stat. §537.455 (Supp. 1994).

<sup>23</sup> Idaho Code §42-222(1).

<sup>24</sup> Public interests in water are protected by the public trust doctrine – a collection of common law principles recognizing the government’s obligation to manage certain types of natural resources in trust for public

benefit (Stevens, 1980). For example, the King in medieval England was obligated to protect public rights to navigation, transportation, and fishing on lands along seashores and rivers. These obligations accompanied any transfer of the lands by the King into private ownership.

In the United States, the U.S. Supreme court has determined that trust responsibilities apply to navigable freshwater bodies and tidelands. Similar to English common law, public trust obligations accompany the transfer of trust resources into state or private ownership or use.

<sup>25</sup> National Audubon Society v. Superior Court, 658 P.2d 709.

<sup>26</sup> Idaho Code §58-1203(2).