

Weather Modification Decision Making: State Law and Public Response

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ABSTRACT

A three-year sociological study has focused on a comparison of public response and decision-making processes with reference to weather modification projects in a number of states. Weather modification is currently subject to legislative regulation in 29 states. Selected characteristics of these state laws are examined as relevant aspects of decision-making contexts for the technology. Existence of such legislative specifications as requirements for licenses, permits, and/or environmental impact statements, and provision for public involvement in decision making, advisory committees, tax fund allocations, liability and water rights, are described. These characteristics are compared to occurrences of public support or opposition in project areas. The effect of state legislative regulations on implementation of proposed projects is also discussed. It is anticipated that the relationships which emerge from the analysis will have implications for future developments in public policy with regard to weather modification.

1. Introduction

At present there are 29 states which have enacted legislation for the regulation of weather modification projects. State laws presently constitute the only extensive legislative regulation of projects, as existing federal legislation requires only reporting. This paper examines the state statutes with particular reference to decision-making processes and public response to implementation of the technology. Relevant characteristics of the laws are described and analyzed with regard to current trends in administrative arrangements, control of operators, provisions for the public interest, public involvement in decision making, and general comprehensiveness.

Occurrences of public acceptance and resistance in project areas are discussed and compared with legislative patterns. Findings suggest that there is a developing trend toward increasing comprehensiveness in weather modification legislation, accompanied by more extensive provisions for public involvement in decision making. This trend appears to be associated with public acceptance rather than resistance. Implications for future developments in public policy with regard to weather modification are discussed.

2. Current trends in state legislation on weather modification

The period 1971 through 1974 has been an unusually active time for passage of legislation designed to regulate the new technology at the state level. Five states passed new statutes on weather modification during that interval, and eight others amended already existing

legislation. In all, 29 states currently have relevant legislation on the books, with many of these currently drafting or having completed administrative law to complement statutes. One notable overall trend, then, is the evolution of state legislation with regard to weather modification technology.

Table 1 summarizes apparent state legislative sentiment toward the technology. Where possible, the actual terminology used by legislators was the basis for categorizing the statute. Such terminology is important to consider because those responsible for decision making turn to the phrases in statutes for guidance in everyday decisions regarding project implementation. For example, if a statute provides for the "encouragement" of weather modification research and operations for the benefit of the citizenry, decision makers need more evidence for nongranteeing of permits and/or licenses than if the statute is neutral or restrictive toward the technology. If the statute provides for encouragement of the technology, the informal sense of "burden of proof" is borne by those resisting projects. Furthermore, the decision makers can appeal to the wording of the statute as a rationale buttressing their decisions.

As shown in Table 1, states on the whole are more inclined to encourage weather modification research (30%) than operational programs (14%). While 30% seem to have a neutral stance toward operations, 22% are neutral toward research. Two states (4%) require only reporting for any field operations. No state prohibits weather modification research; two states prohibit lightning suppression operations but permit other activities. Forty-two percent of all states have no

weather modification legislation whatsoever; presumably research and operations can be conducted in these states without any form of state control. While interpretation of such a social fact must remain speculative, it seems fair to suggest that the technology is not viewed in these states as either effective enough or threatening enough to require legislative regulation. On the other hand, the growing number of states developing legislation suggests a serious view of the technology's value or potential value on the part of state legislators and the constituencies they represent. Judging from the development of state law, weather modification technology is "coming of age."

a. Administration of weather modification at the state level

Most state laws provide for a state agency to be responsible for implementation of the statute and development of administrative rules and regulations which often flesh out skeletal statutes. Table 2 summarizes the types of administrative agency granted this responsibility. Most often named (by about a quarter of the states) is the state department of natural resources or conservation; also commonly named are departments of water resources and departments of agriculture. Special weather boards are provided for by five states. The nature of the state agency responsible for decision making has implications for patterns of decision making because agencies vary in the political constituencies to which they are responsive. For example, a department of agriculture obviously has an agriculturally oriented staff and constituency, and has ties, both professional and informal, to other agricultural organizations such as Farm Bureau, county agents, and land-grant universities. Since agriculturists comprise a significant economic group standing to benefit directly from weather modification operations, administrative responsibility in a department of agriculture may result in decision making favorable to operational weather modification.

On the other hand, the active agency constituents of departments of natural resources and/or conserva-

TABLE 1. What legislative stance toward the technology is reflected in the statute? Does the statute "encourage," "regulate," or "prohibit" weather modification research and operations?

	Research		Operations			
	%	N	%	N	%	N
Encourage	30	(15)	14	(7)		
Regulate	22	(11)	30	(15)		
Reporting only	4	(2)	4	(2)		
Regulate/prohibit	0	(0)	4	(2)		
Not mentioned	2	(1)	6	(3)		
Total number of states with legislation					58	(29)
Total number of states without legislation					42	(21)
					100	(50)

N=number of cases (states with statutes).

TABLE 2. What state agency is responsible for administering weather modification statute?

	%	N
Department of Natural Resources/Conservation	24	(7)
Department of Water Resources	17	(5)
Department of Agriculture	17	(5)
Special Weather Control Boards	17	(5)
Aeronautics Commission	7	(2)
Other*	17	(5)
	99	(29)

* Includes Land Department, Governor, County Commissioners, Department of Registration and Education, and Interstate Commerce Commission.

tion have historically been those interested in environmental concerns. Since environmentalists tend to be at least selectively opposed to what they perceive as additional technological intervention in the natural order, they might exert pressure for weather modification decisions taken at such an agency to favor research over operational weather modification.

Thirteen states provide for an advisory committee's participation in the weather modification decision process (see Table 3). The sociological function of the committee is representation of interested citizen and scientific groups in decision making. That is, the existence of a committee (composed of, for example, scientists and agriculturists) provides expert citizen input to the process, as opposed to sole reliance on an administrator who might or might not have technical expertise. Thus, the use of an advisory committee invites broader social participation.

While a few advisory boards and commissions have final authority on licensing and permits, others merely recommend. The tendency in practice in states having weather modification advisory committees is for the responsible administrator to accept and implement advisory committee recommendations.

Citizen participation in the weather modification decision process can also be expanded by the formation of weather modification districts. In particular, local

TABLE 3. Does the statute provide for an advisory committee?

	%	N
No	48	(14)
Yes	45	(13)
Not applicable*	7	(2)
	100	(29)

* Law administered by an already-existing board.

TABLE 4. Characteristics of weather modification statutes.

Statute characteristic	Yes		No	
	%	N	%	N
Does the law provide for establishment of weather modification districts?	17	(5)	83	(24)
Does the law provide for expenditure of state and/or local tax monies for weather modification?	28	(8)	72	(21)
Is the weather modifier required to have a license to operate?	72	(21)	28	(8)
Does the state require proof of financial responsibility?	55	(16)	45	(13)
Does the state require a permit for projects?	38	(11)	62	(18)
Are weather modifiers required to report operations to the state?	69	(20)	31	(9)
Is there specific mention of "adequate" safeguards for human life, health, animals and the environment?	66	(19)	34	(10)
Is provision made for weather modification in emergency situations?	45	(13)	55	(16)
Is publication of notice of intent required?	45	(13)	55	(16)
Does the statute provide for interstate cooperation?	38	(11)	62	(18)
Does the statute claim sovereignty over atmospheric water?	28	(8)	72	(21)
Is provision made for prevention of inter-project contamination?	10	(3)	90	(26)

control over projects is increased if districts are a legal prerequisite for the implementation of projects. Table 4 shows that 17% of the states with weather modification statutes provide for or require the establishment of weather modification districts, while 83% do not. The establishment of weather modification districts in South Dakota has led to policy setting by local representatives who also hold veto authority over operations. North Dakota provides for weather modification districts which have authority over operations in their areas. Neither state has experienced organized resistance to weather modification activities in recent years. We feel that citizen participation through governmental process is one important variable in accounting for this outcome.

Funding of weather modification projects is of sociological interest because funding source and decision-making control over projects tend to go hand-in-hand.

For example, if state and local tax monies are authorized as funding sources for weather modification projects, it is likely that control of projects will reside at the state and local levels.

Another likely outcome of the authorization of tax monies is that operational weather modification will be designed to take the major weather needs of the community into account, rather than the needs of one or two special interest groups in the area.

Data summarized in Table 4 show that 72% of states do not make provision for the expenditure of state and/or local tax monies on weather modification.

Taken together, these findings from state legislation suggest an overall pattern of lack of provision for citizen participation in and broad-based community support for weather modification programs.

b. State control of operators

To protect the public interest, most state legislation makes some provision for control of those seeking to modify the weather. We scrutinized statutes for specific provisions for licensing of operators, requirements for financial responsibility, permits for projects, reporting on activities to the state, and sanctions for violation of the statute.

Licensure is the most commonly employed form of control. As presented in Table 4, data show that 72% of states with legislation require weather modifiers to have a license issued by the administering agency. Most of these require annual renewal of the license. Criteria for granting of licenses vary by state and are not usually specified in the statute—they are developed as part of administrative law.

Over half of the states with laws require that the weather modifier demonstrate proof of financial responsibility (see Table 4). Most often required is insurance coverage or bond in the event damages are incurred as a result of weather modification activities.¹ The coverage required by statutes ranges from \$15,000 to \$200,000 with the latter being the modal amount.

Some states require (in addition to a license) that a permit be granted for each specific project. The permit-granting function guarantees greater control over each weather modification project in the state. However, nearly two-thirds of the states having weather modification laws make no provision for permits (see Table 4). In these states, licensed weather modifiers (where licenses are required) are free to conduct operations without specific permission from an administering agency.

About 80% of the statutes provide for sanctions with regard to their violation (see Table 5). Most of these

¹ To our knowledge, no one has ever collected damages from weather modifiers as a result of claims resulting from weather effects.

see the severity of the offense as minor; only one state terms violation of weather modification law a felony. License revocation is mentioned in 17 states; twelve states provide for fines ranging from \$100 in Texas to a high of \$5000 in Colorado, Nebraska and Wyoming. Nine states specify jail sentences.

Clearly, weather modification statutes cannot be viewed as dealing with a technology regarded as a serious potential danger. While some modicum of control and monitoring seems to be considered necessary, the overall degree and comprehensiveness of control appears to be limited.

c. Provision for the public interest

The existence of legislative control of weather modification technology implies concern about protection of the public interest. Indeed, some statutes [e.g., Ill. Sec. 2(a)] explicitly state that "weather modification affects the public health, safety and welfare and the environment, and is subject to regulation and control in the public interest."

We examined statutes to discover whether they gave explicit mention to guaranteeing adequate safeguards for the public in the presence of field operations, whether they required environmental impact statements, whether they required reporting, and whether they recognized and provided for emergency situations.

Table 4 shows that two-thirds of the statutes specifically mention a requirement for "adequate" safeguards for human life, health, animals, and the environment. Usually the determination of the adequacy of precautions taken by operators is not spelled out by statute, but left to the discretion of the administering agency.

No state requires an environmental impact statement (EIS) by weather modification statute. Kansas administrative rules are currently being drafted providing for an EIS at the discretion of the state administrator. California's Attorney General has ruled that EIS's must be prepared for weather modification projects in that state. Davis (1974a) has reported that EIS's are currently being required in South Dakota, Pennsylvania and Montana.

Since the EIS is a document requiring extensive multi-disciplinary research, considerable funding is essential to produce it. Weather modifiers and state agencies typically do not have the resources necessary to prepare the statement. Since virtually all states do not by statute require an EIS for weather modification projects, it seems fair to conclude that the potential or probable impact of field operations on the environment has, to date, been generally thought to be insignificant.

Requirements to report weather modification activities to the state occur in 69% of the statutes (see Table 4). One function of reporting is that officials are able to gain knowledge about the technology as it is applied in their respective states. The state is thus

TABLE 5. Does the statute provide sanctions for its violation?

	%	N
Yes	79	(23)
No	21	(6)
	100	(29)
Level of offense		
Misdemeanor	70	(16)
Felony	4	(1)
Other*	8	(2)
Unknown	17	(4)
	100	(23)

* "Misconduct," "violation."

better able to ascertain the level of benefit that can be expected from the application of weather modification and to be better informed for decision making generally.

About a third of the statutes provide specifically for weather modification operations to alleviate emergency situations dangerous to the public interest (see Table 4). Most often mentioned are drought, fog and sleet. Usually such provisions involve suspension of such regular controlling mechanisms as permits and public hearings, so that operations may be carried out in quick response to the emergency.

No other specific provisions for the public interest have been noted in these statutes. Such provisions appear to be minimal, even in states with the most comprehensive statutes.

d. Provision for public involvement

Some statutes provide specifically for notification of the public that a weather modification operation is about to be implemented. As shown in Table 4, about half of the statutes require publication of notice of intent to conduct weather modification, and 55% do not. With publication of intent, usually required for a two-week period, the public has the opportunity to respond to the appropriate agency prior to the onset of operations if there is a serious objection. In the absence of public response, the final authorization to proceed is usually automatic.

A more serious effort at informing and involving the public is necessitated by statutory requirements for public hearings in connection with obtaining a permit to carry out a specific weather modification project (see Table 6). Four states require public hearings and three others make them optional depending on public response or lack of it. Fully three-quarters of the statutes have no provision for public hearings in connection with proposed projects.

Hearings are a formalized mechanism for participation in the decision process of citizens in a potential

TABLE 6. Does the statute provide for a public hearing before a project permit is granted?

	%	N	%	N
Yes, required	14	(4)		
Yes, optional	10	(3)		
Yes, total			24	(7)
No			76	(22)
			100	(29)

affected area. The relative paucity of provision for public hearings underscores the lack of concern for public involvement in the weather modification decision process, especially involvement by those most likely to be directly affected by proposed operations.

e. Socio-political considerations

Potential areas of conflict with regard to the implementation of a new technology can, with some foresight, be anticipated by legislators. A few statutes have given explicit recognition to such problems as water rights and coordination of projects across state lines, but most do not take potentially conflictual matters into account.

As shown in Table 4, 38% of the statutes provide for minimal interstate coordination when effects of projects crossed state lines. No formal mechanisms assigning the specific responsibility for carrying out such coordination were designated by any states. The regular administering agency was generally left to its own devices.

Eight states claimed sovereignty over atmospheric water above the land contained within their borders (see Table 4). This provision may have been intended as a bulwark against future claimants of the water—whether the Federal government, individuals, corporations, or communities located downwind of projects.

None of the statutes made special provision for water rights pertaining to moisture received as a result of cloud seeding. In practice, those producing increments in precipitation control the distribution of additional water. To our knowledge, no court case has yet been argued on this point.

f. Scientific considerations

Other than encouragement of weather modification research in several states, virtually no statute made explicit legal provision for protection of scientific interest. The only explicit provision of this kind that we discovered was in specific reference to prevention of inter-project contamination (see Table 4), prohibited by three states. This area of the law probably remains undeveloped because of the current scientific ambiguity about "extra-area effects" (or "downwind effects"). That is, the nature and extent of these effects for various types of weather modification operations is not fully understood at present.

TABLE 7. Comparison of legislative comprehensiveness with favorability.

	Mean favorability score
Comprehensive	3.75
Moderate	2.57
Minimal	2.5
Non-comprehensive	1.25

3. Comprehensiveness of state laws on weather modification

Comprehensiveness refers to the combined scope and specificity of weather modification laws. Nineteen statutory characteristics,² forming a scale in ascending frequency of occurrence, were utilized to measure the comprehensiveness of laws. One point was assigned for each item included in a law. The statutes which scored as most comprehensive, relative to existing weather modification legislation, contained the largest number of items in the scale and also included items ranging from least to most frequent in occurrence. As comprehensiveness scores diminished, items included in the statutes tended to fall increasingly at the "frequent" end of the spectrum.

The scores ranged from zero to thirteen. Four categories emerged: "Comprehensive" (10–13), "Moderately comprehensive" (7–9), "Minimally comprehensive" (4–6) and "Non-comprehensive" (0–3). Eight statutes (28%) were in the "Comprehensive" range, seven (24%) were "Moderately comprehensive," six (20%) "Minimally comprehensive," and eight (24%) were "Non-comprehensive" in rank.

For purposes of this analysis, favorability has reference to explicit statements in the laws of "encouragement" or "promotion" of operations and/or research, or exemptions from license and/or permit requirements for certain activities (primarily research and emergency projects) (see Table 1). Favorability scores were calculated for statutes on a scale of 1–4; four points were assigned for encouragement of both research and operations; three for encouragement of research combined with regulation of operations; two for regulation of both research and operations; and one point for regulation of research only or operations only and for reporting as the only regulatory requirement. Mean "favorability" scores were calculated for each category of comprehensiveness, as shown in Table 7.

When statutory comprehensiveness was compared with legislative favorability, the pattern which emerged

² See Appendix. In order of ascending frequency of occurrence, the following categories were used: prohibition of certain activities [lightning suppression, Pennsylvania and West Virginia (2)], and items numbered 20(3); 17a(4); 3(5); 4(5); 17a & b(7); 8(7); 5(8); 19(8); 12c(9); both 6 & 9(10); 18(11); 2(13); 16(13); 7(16); 10(20); 6 or 9(22); 11(23).

showed the most comprehensive statutes as the most consistently encouraging of weather modification research and operations.

Comprehensiveness is seen as an indicator of evolving experience and concern with weather modification activities. It is noteworthy that 87.5% (all but one) of the comprehensive statutes were either initiated or extensively amended in the period from 1971-74. This is true of only 57% of the moderately comprehensive laws, 17% of the minimally comprehensive, and 13% of the non-comprehensive statutes. It appears that as weather modification becomes more salient to legislators and potential beneficiaries, legislative codification tends to become more comprehensive. Salience can be enhanced either through increasing experience with publicly accepted operations and/or research, incidents of strenuous opposition to weather modification, or anticipated future utilization of the technology.

Legislation in Colorado, Pennsylvania and Washington (all comprehensive) was influenced by public resistance to ongoing projects. Kansas, Oklahoma and Utah, three states in the comprehensive category which passed weather modification legislation in the 70's, have had extensive experience with weather modification operations. South Dakota's 1972 amendment was preparatory to major state involvement in cloud seeding operations. Illinois' comprehensive 1973 law has not yet been applied to operational projects, but extensive ongoing research by the Illinois State Water Survey suggests the anticipatory nature of the law. Other states with recent weather modification legislation tend to conform to this pattern.

4. Incidence of resistance to and acceptance of weather modification activities

In the following discussion of acceptance and resistance with reference to selected weather modification projects, the criteria for inclusion of incidents were as follows:

1) Only projects for which we have field data were considered. Since no federal reporting requirements were in effect during much of the study period, an important part of the investigation was to discover *where* weather modification projects were being carried out. This was an inordinately difficult task, involving use of formal and informal information sources.

2) We have included only projects which were initiated or continued *after* state legislation was enacted. A project spanning several years' time in one area was counted as one project unless it changed sponsor or character (as from emergency drought relief to experimental).

A total of 75 projects in 20 states fulfilled the above criteria. Of these, 61, or 81%, met with acceptance; and 14 (19%) experienced resistance.

TABLE 8. Resistance to or acceptance of weather modification projects compared with statutory comprehensiveness.

	Resistance only		Mixed		Acceptance only	
	N	%	N	%	N	%
Comprehensive	1	50	2	25	4	40
Moderate	1	50	4	50	1	10
Minimal	—	—	2	25	2	20
Non-comprehensive	—	—	—	—	3	30
Total	2	100	8	100	10	100

Resistance as used here is defined as either (i) organized opposition: two or more persons cooperatively taking action to block or halt a weather modification project in their area; or (ii) organized resistance: two or more persons cooperatively deciding to withhold support from a project they had previously supported. Acceptance is defined as the absence of resistance.

When incidence of resistance was compared with statutory comprehensiveness, no distinct pattern emerged (see Table 8). Thus, the comprehensiveness of legislation does not appear to influence directly the development of resistance.

Among the statute characteristics discussed in this paper, the only ones that appear to be systematically linked with incidence of acceptance or resistance are those identified as provisions for public involvement in decision making: weather modification districts, tax support for operations, public hearings for permits, and advisory committee provisions. Statutes were assigned one point for each of these characteristics included, with a maximum of four points and a minimum of zero obtainable, to arrive at a "Public Involvement Score" (PIS).

As indicated by Table 9, incidence of post-legislative resistance is negatively associated with increments of provision for public involvement in the decision-making process. This finding suggests that existing opportunities for citizen participation in decision making tend to forestall the development of resistance to weather modification projects.

It was also noted that PIS's were much higher for "comprehensive" statutes than for any other category ($\bar{x}=2.1$). PIS for moderately comprehensive laws dropped to a mean of 1.1, and for minimal and non-com-

TABLE 9. Comparison of incidents with PIS for states with statutes, data and projects.

Incidents	%	N	Mean PIS
Resistance only	10	(2)	0.5
Mixed	40	(8)	1.0
Acceptance only	50	(10)	1.4
	100	(20)	

prehensive laws the mean scores were 0.5 and 0.6, respectively.

5. Discussion

The major findings of this analysis on the social implications of state weather modification legislation are as follows:

1) The burgeoning of weather modification legislation in the period from 1971 through 1974 is interpreted as a sign that the technology is "coming of age."

2) As experience with modern weather modification technology increases and becomes more widespread over time, the increase in comprehensiveness of laws tends to accelerate.

3) There is tentative evidence that favorable legislative attitudes toward the technology are associated with comprehensiveness in the law.

4) There appears to be rather widespread lack of concern for public involvement in decision making, but as legislative comprehensiveness increases, opportunities for citizen input tend to be codified to an increasing extent.

5) There is tentative evidence that provision for public involvement in the decision process is not associated with incidence of resistance to projects.

In conclusion, the findings imply that increments in legislative comprehensiveness and provision for citizen involvement in decision making on weather modification should not necessarily be regarded as obstacles to implementation for weather modifiers. On the contrary, such developments may create a political climate in which the major barrier to weather modification projects, organized public resistance, is less likely to occur.

It seems that the current trend is toward an increase in the number and comprehensiveness of state weather modification laws. The implementation of weather modification technology in a generally beneficial and publicly acceptable manner appears to be fostered by this trend.

REFERENCES

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APPENDIX

Selected Characteristics of State Weather Modification Statutes

State	Legislative characteristic																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Ariz.	f	no	—	no	no	yes	no	—	no	yes	yes	abc	yes	no	no	no	no	no	no	no
Calif.	b	no	—	no	no	yes	no	—	no	yes	yes	b	yes	yes	no	yes	no	no	no	no
Colo.	a	yes	yes	no	no	yes	yes	no	yes	yes	yes	a c	yes	no	no	no	a	no	yes	yes
Conn.	d	yes	no	no	no	no	no	—	no	no	no	—	yes	no	no	no	no	yes	no	no
Fla.	a	no	—	no	no	yes	yes	yes	no	yes	yes	abc	no	no	yes	yes	no	no	no	no
Hawaii	a	no	—	no	no	no	no	—	no	no	no	—	no	no	no	no	no	no	no	no
Idaho	c	no	—	no	no	no	no	—	no	yes	no	—	no	no	no	no	no	no	no	no
Ill.	f	yes	yes	no	no	yes	yes	no	yes	yes	yes	b	yes	no	yes	no	b	yes	no	yes
Iowa	d	yes	no	no	yes	no	no	—	no	no	no	—	no	no	no	no	no	no	no	no
Kan.	b	yes	yes	no	no	yes	yes	yes	yes	yes	yes	b	yes	yes	yes	yes	a	no	no	no
La.	c	no	—	no	no	yes	no	—	no	no	yes	a	no	no	no	no	no	no	yes	no
Mass.	d	no	—	no	no	yes	no	—	no	no	yes	a	no	no	yes	no	a	no	no	no
Minn.	f	no	—	no	yes	no	no	—	no	no	no	—	no	no	no	no	no	no	no	no
Mont.	a	yes	no	no	no	yes	yes	no	yes	yes	yes	b	yes	yes	yes	yes	b	no	no	no
Neb.	c	no	—	yes	yes	yes	no	—	no	no	yes	a	yes	no	no	no	no	yes	yes	no
Nev.	a	yes	no	no	no	yes	yes	yes	yes	yes	yes	b	yes	no	yes	yes	no	no	no	no
N. H.	f	no	—	no	yes	no	no	—	no	no	no	—	no	no	no	no	no	yes	no	no
N. M.	d	no	—	no	no	yes	yes	no	no	yes	yes	b	yes	no	no	no	no	yes	no	no
N. Y.*	f	no	—	no	yes	no	no	—	no	no	no	—	no	no	no	no	yes	no	no	no
N. Dak.	e	no	—	yes	yes	yes	yes	no	no	yes	yes	no	no	no	no	no	no	yes	yes	no
Okla.	b	yes	no	yes	yes	yes	yes	no	yes	yes	yes	abc	yes	no	no	yes	no	yes	no	yes
Ore.	c	no	—	yes	yes	yes	yes	yes	no	yes	yes	b	yes	no	yes	yes	no	no	no	no
Penna.	c	yes	yes	no	no	yes	yes	yes	no	yes	yes	abc	yes	yes	yes	yes	yes	no	yes	no
S. Dak.	a	yes	yes	yes	yes	yes	yes	no	yes	no	yes	abc	yes	yes	yes	yes	no	yes	yes	no
Texas	b	yes	no	no	no	yes	yes	no	yes	yes	yes	abc	yes	no	yes	yes	no	yes	no	no
Utah	b	yes	no	no	no	yes	yes	no	yes	yes	yes	b	yes	no	yes	yes	b	yes	yes	no
Wash.	a	yes	no	no	no	yes	yes	yes	yes	yes	yes	b	yes	yes	yes	yes	a	yes	no	no
W. Va.	e	no	—	no	no	yes	yes	yes	no	yes	yes	abc	yes	no	yes	yes	no	no	no	no
Wis.	f	no	—	no	no	no	no	—	no	yes	yes	a	no	no	no	no	no	no	no	no
Wyo.	d	no	—	no	no	no	no	—	yes	yes	yes	a c	yes	no	no	no	no	no	yes	no

1. Administering agency
 - a. Dept. of Natural Resources/Conservation
 - b. Dept. of Water Resources
 - c. Dept. of Agriculture
 - d. Special Weather Control Boards
 - e. Aeronautics Commission
 - f. Other
2. Advisory committee provision?
3. Advisory committee membership specified?
4. Weather modification districts?
5. Tax provision?
6. License required?
7. Proof of financial responsibility required?
8. Amount of financial responsibility specified?
9. Permit required?
10. Reporting required of operators?
11. Sanctions for violations specified?
12. Punishment specified?
 - a. fine
 - b. revocation of license or permit
 - c. jail sentence
13. Safeguards for public safety, etc.?
14. EIS required? (not full-scale)
15. Provision for emergency operations?
16. Publication of notice of intent required?
17. Public hearing provision?
 - a. required
 - b. optional
18. Intergovernmental cooperation?
19. State sovereignty over atmospheric water?
20. Prevention of inter-project contamination?

* In our attempt to establish the existence of weather modification legislation for the State of New York we called the State Attorney General's office and a state legislator who had proposed weather modifications legislation which failed to pass. Neither of these sources knew of a state law regulating weather modification. However, as this paper was going to press, a copy of the State's General Municipal Law, Sec. 119-p, regarding "Projects Relating to the Use of Atmospheric Water Resources" arrived in the mail from the Cornell Law Library. This statute, in essence, authorizes municipal corporations to "conduct or engage in projects, experiments, and other activities designed to develop the use of atmospheric water resources, and to make scientific evaluations of such projects, experiments and other activities, or to contract therefor, and to appropriate and expend moneys therefor." According to the criteria outlined in this paper, this law is non-comprehensive in nature.