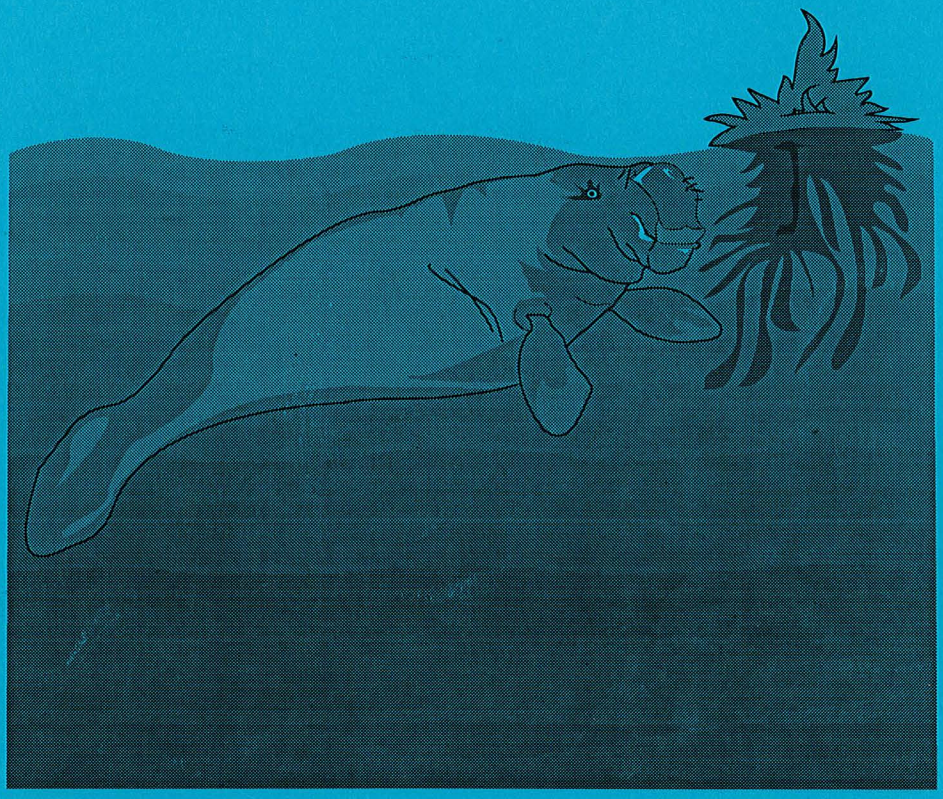
SUNRISE STUDY

ON THE PROPOSAL TO

ESTABLISH REGULATION OF

ENVIRONMENTAL PROFESSIONALS



The Honorable Jack N. Tobin, Chairman

The Honorable James Bush III, Vice-Chairman

By the Staff of
Committee on Business and Professional Regulation
Lucretia Shaw Collins, Staff Director

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November, 1994

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I. Introduction

This report is a sunrise review relating to a proposal to initiate regulation of environmental professionals. Section 11.62, Florida Statutes, known as the "Sunrise Act," establishes a procedure for evaluating a proposal to initiate regulation of any occupation, trade, group, or profession.

The purpose of a sunrise review is to examine the unregulated practice of an activity to determine whether the absence of regulation poses a serious threat to the public's health, safety, and welfare. If regulation is deemed necessary to protect the public, the review must then determine the least intrusive, least costly, and lowest form of regulation which will accomplish the public protection purpose behind the regulation.

The Sunrise Act (s.11.62, Florida Statutes) specifically provides that it is the intent of the Legislature:

1) That no profession or occupation be subject to regulation by the state unless the regulation is necessary to protect the public health, safety, or welfare from significant and discernible harm or damage and that the police power of the state be exercised only to the extent necessary for that purpose; and

2) That no profession or occupation be regulated by the state in a manner that unnecessarily restricts entry into the practice of the profession or occupation or adversely affects the availability of the professional or occupational services to the public.

Therefore, in order to recommend regulation at all, the research must conclude that significant and discernible harm will result from lack of regulation. Then, the level of regulation (mandatory licensure, registration, or voluntary certification) must be set at the lowest and least intrusive level that will accomplish the necessary public protection.

The Sunrise Act requires that the Legislature consider four basic factors before determining that regulation is needed. Those factors are:

1) Whether the unregulated practice of the profession or occupation will substantially harm or endanger the public health, safety, or welfare and whether the potential for harm is recognizable and not remote;

2) Whether the practice of the profession or occupation requires specialized skill or training, and whether that skill or training is

readily measurable or quantifiable so that examination or training requirements would reasonably assure initial and continuing professional or occupational ability;

3) Whether the public is or can be effectively protected by other means; and

4) Whether the overall cost-effectiveness and economic impact of the proposed regulation, including the indirect costs to consumers, will be favorable.

Prior to the 1994 Regular Session of the Florida Legislature representatives of the Florida Association of Environmental Professionals (hereafter referred to as "the proponents") submitted a request that a sunrise review be conducted to determine whether to recommend regulation of environmental professionals. The proponents were forwarded a standard copy of the sunrise questionnaire, the completion of which is necessary in order to conduct a sunrise review.

This questionnaire provides an information base for considering the proposal, and allows the proponents of regulation an opportunity to submit their proposed legislation, including the justifications for the proposal and the information necessary to evaluate the proposal. Upon receipt of the completed questionnaire, committee staff engages in research to gather further information, including comparing the proposal to regulation in other states, and investigating whether similar activity is currently regulated in Florida.

However, due to the technical nature of the information necessary for a thorough review, the proponents requested that the completion of the review be postponed until the 1994-1995 interim period. According to the proponents, since no other state has a comprehensive licensure or certification program for environmental professionals (EPs), more time was necessary to develop a finite definition and parameters for the possible regulation of the profession.

Subsequent to the 1994 Regular Session of the Florida Legislature, the Committee on Business and Professional Regulation received a more complete response to the sunrise questionnaire, and determined that a sunrise review will be completed prior to the 1995 Legislative Session.

Staff has examined the completed sunrise questionnaire, and has sought input from local governments and state agencies likely to employ EPs. Staff has also sought input from construction and development interests, as well as organizations and associations identified as interested parties. Additionally, staff has identified and communicated with other states which have enacted legislation regulating environmental professionals, in order to compare that regulation to the proponents' proposal.

II. Executive Summary

In 1988, preliminary efforts were undertaken by the Florida Association of Environmental Professionals (FAEP) to develop a legislative package aimed at regulating the practice of environmental professionals in Florida.

The House Business and Professional Regulation Committee began an interim project during the 1993-1994 legislative year which continues through the present and will be completed prior to the 1995 Legislative Session. No bills have ever been filed or considered.

According to the proposal under review, an environmental professional is basically anyone who engages in "environmental management." "Environmental management" is defined as the practice of "collection, analysis, and interpretation of scientific data" involved in the preparation or promulgation of various specific assessments or evaluations relating to environmental concerns.

Presently, although persons performing environmental management are sometimes licensed in some professional field (engineering, industrial hygiene, landscape architecture, land surveying, geology, law, etc.) or have academic degrees in areas not professionally licensed (biology, chemistry, forestry management, ecology, etc.), there is no state licensure regulation of these individuals, as "environmental professionals." Instead, anyone wishing to perform environmental professional services may do so, providing his employer or client is satisfied that he is qualified for the job.

There are no other states with a mandatory licensure program for the broad category of Environmental Professionals. However, several states have a more narrow or limited regulation of some category within "environmental management" (i.e., hazardous waste management).

It appears that the largest portion of employment market for environmental professional services exists primarily with state or local governments agencies, and with land development and construction interests. The proponents assert that without licensure, the state or local agencies, and the development and construction interests which employ environmental professionals often do not have the information or background to thoroughly evaluate the professional qualifications of those whom they would hire.

According to the proposal submitted by the proponents, "environmental management" means the collection, analysis, and interpretation of scientific data involved in the preparation or promulgation of the following:

(a) Natural and physical resource assessments including categorical exclusions, environmental assessments and environmental impact statements, environmental features analysis for site feasibility or selection, and environmental planning for land development projects;

(b) Assessments of the presence or threat of environmental contamination upon, in, or under real property, and planning, designing, or implementing remedial activities to address such environmental contamination;

(c) Surface water and wetland evaluation including jurisdictional determinations, wetland quality evaluations, wetland mitigation, creation, preservation, or restoration plans, and lake management plans;

(d) Upland evaluations, including protected species identification, protected species management plans, and upland habitat management planning, evaluation, and restoration; and

(e) Evaluation of domestic and industrial discharges, impacts of such discharges on air, soil, surface and groundwater resources, and monitoring pollution prevention, and waste reduction plans for such discharges.

The proposal further states that "Environmental Management" does not include the management of agricultural resources "in the ordinary course of these activities," except as such activities require environmental permits.

The proposed legislation also provides that some persons, including employees of state or local agencies, may be exempted "provided their work is reviewed and/or prepared under the supervision of an environmental professional, or other professional to the extent that the supervision meets the standards adopted by rule of the board."

The proposal sets forth three alternate paths to licensure:

1) The applicant could show "proof of certification by a board approved organization"; or

2) The applicant could show that he has a four year degree in "the natural or physical sciences," and five years of environmental management experience, three years of which would be work experience under a licensed environmental professional; or

3) Five years experience in responsible charge of environmental management work.

According to the proposal, paths (2) and (3) would "close" after one year. This, in itself, represents a problem. The only path remaining would be a path requiring the person to obtain certification from any one of several private organizations. It is entirely improper and inappropriate for government to require licensure in order to practice a profession, and then delegate to any private organization the sole authority to determine who shall be licensed. If such "gate-keeping" authority were delegated to a private organization -- or organizations -- the government will have "given away" its ability to effectively address the complaints of constituents who allege that the private licensing authority is unfairly denying them licensure.

It is true that certification by a private organization may be allowed to suffice as an alternative choice in lieu of a government offered and administered certification plan. The problem comes in when certification by various private organizations is the sole path available. In such an instance, the state has lost the ability to assure that licensure is not being unfairly withheld from qualified persons. This problem would have to be addressed in any legislation establishing regulation of environmental professionals,.

The proposed regulation would create a Board of Environmental Professionals. There is also a provision for the board to submit to the Legislature by September 1, 1997, a report on the issues of licensure qualifications, including possibly recommending a certification examination, or an internship qualification path.

The proposal provides that the board shall establish by rule classifications of environmental professional licensure based on the specialties which exist in the field of environmental management. Such classifications shall include, but are not limited to: the natural sciences including wetland and upland habitats; wildlife management; the physical sciences, including soil classification, pollutants and hazardous waste substances and materials; water quality; and air resources.

With regard to whether harm has occurred due to the unregulated practice of environmental management, the proponents submitted seven letters from members of their association which alleged knowledge of four specific instances of harm or incompetent practices by persons providing environmental assessments or otherwise practicing environmental management. These letters also contained non-specific assertions that they often worked with (or heard of) incompetent persons practicing environmental management. In addition to complaints about unlicensed persons practicing environmental management, several of the letters complained that the licensed engineers they worked with were incompetent or seriously unknowledgeable in some areas of environment management.

In addition to these specific allegations, the proponents allege that more extensive environmental damage is likely to have occurred due to the unlicensed practice of environmental management, but note great difficulty of establishing specific instances of harm due to their assertion that:

> Natural ecosystems rarely experience cataclysmic events.... Instead, they decline slowly until they reach a new equilibrium, with the cause of the decline obscured by time.

Staff has been unable to identify any agency serving as a repository of complaints related to the unregulated practice of environmental professionals. To the extent that licensed professionals, such as engineers, perform "environmental management," complaints would be filed with the agency or board charged with regulation of that profession.

Since local governments and state agencies would employ environmental professionals in some instances, and evaluate the work of industry-employed environmental professionals in other instances, staff sent letters to each of the 67 counties, as well as the state agencies likely to have an interest in the issue. The letter inquired as to their estimation of their capability of judging the competency or qualifications of such persons absent a mandatory licensure program. In addition, they were asked if they could identify any specific instances of harm resulting from the unregulated practice of environmental management, and their opinion on the issue of whether licensure of environmental professionals should be established. Staff also sent similar letters to development industry representatives and other interested parties.

Twenty-one (21) of the 67 counties responded. All 21 counties stated that they currently have no problem in selecting qualified people to perform environmental services (however, some agreed that licensure would assist in their hiring of staff and consultants). None of the 21 counties reported any instance of harm to the public in the unregulated practice of environmental management.[1] Five counties (Collier, Clay, Broward, Pinellas, and Palm Beach) indicated support for mandatory licensure of environmental professionals.

Staff also sent letters requesting input from each state agency or commission who might be involved in environmental management, as well as organizations identified as interested parties. The majority of state agencies and commissions indicated they opposed licensure. An overwhelming majority of the interest groups providing input also indicated they opposed licensure for environmental professionals:

It should be noted that those who oppose licensure consistently gave an expectation of "increased cost of the service under licensure" as a reason for their opposition. As one respondent stated: "Licensure would likely drive up the cost of doing business without appreciable benefit to the community."

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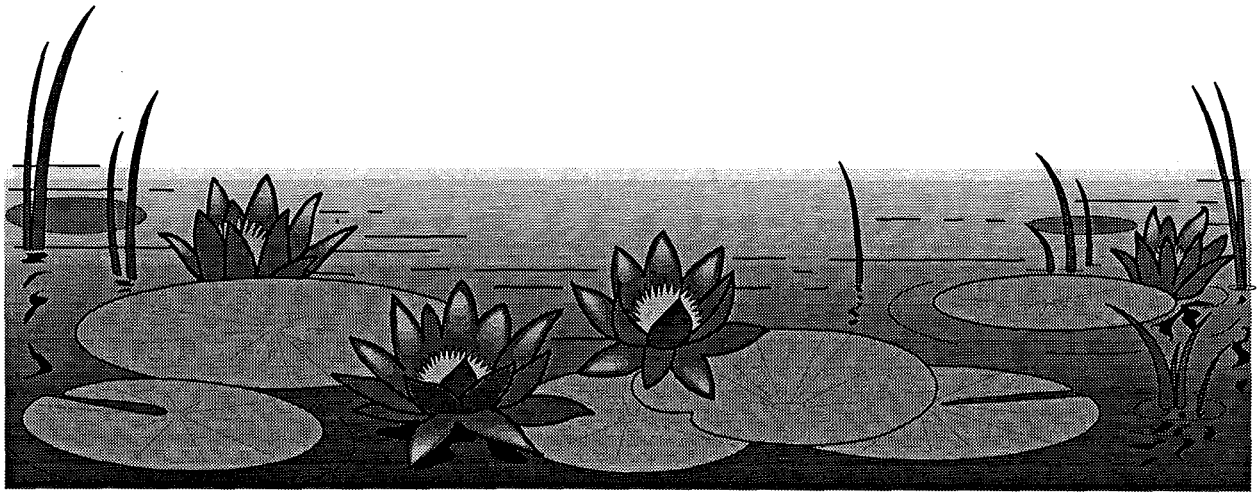
[1] The response from Pinellas County made reference to a major environmental problem with one public project in their jurisdiction. However, as described in the response, the problem was a failure to seek hazardous waste assessment rather than an instance of an incompetent opinion or assessment. Therefore, this seems more a local land purchasing procedure oversight, rather than a problem resulting from the incompetent practice of environmental management.

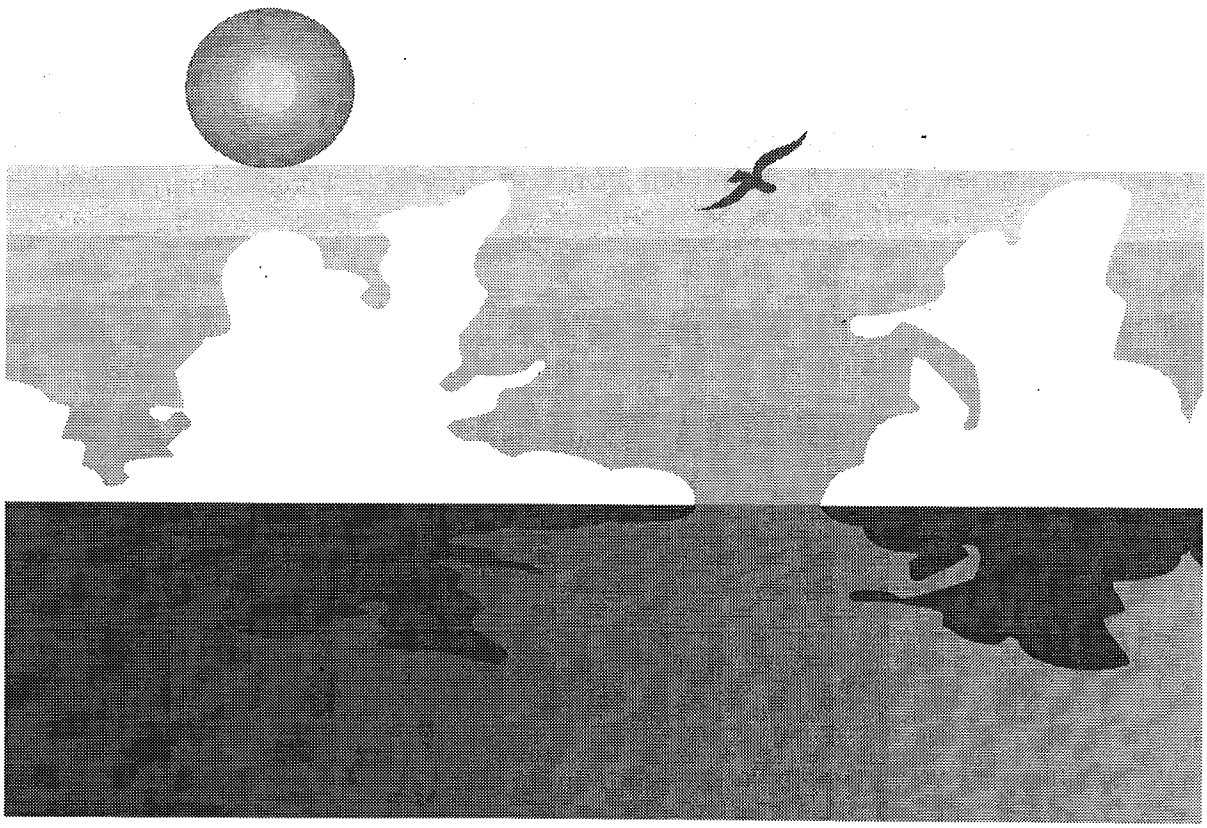
Also, there is already some regulatory oversight in this area. In many cases, state or local agencies require plans to be submitted to permitting authorities which are sealed by a state licensed person (i.e., licensed engineer, geologist, land surveyor, or landscape architect). These licensed persons may employ various other unlicensed persons as contributors toward the plans that they seal. The persons they employ, and whom they rely upon when putting together these plans or assessments, may have academic credentials or may possess voluntary certifications issued by private organizations, but neither is required.

By requiring state licensed individuals to seal the plans, it appears that some accountability and public protection already exists to an extent, in some cases. In other words, by assuming responsibility for the overall plan or assessment, the licensed person is made responsible for the quality of the work. Any complaints for substandard work could be processed against the licensed individual. However, as previously noted, all environmental management work does not have a permit requirement Additionally, the proponents allege that even in those cases where a permit is required, and a licensed person "seals" the plans, sometimes the licensed person is not actually qualified to judge the quality of all of the environmental management work, even though he is responsible for it and will be held accountable for it.

Finally, several private industry practitioners point out that the potential for civil suits on large projects already cause the development or construction interests who select the environmental professionals to assess their qualifications very carefully. They asserted that these civil liability concerns significantly protect the public without the need for licensure in may instances.

After assessing all of the input provided by the proponents, as well as the information gained through staff investigation, this report concludes that there is not sufficient evidence to establish that the unregulated practice of this activity results in significant and discernible harm to the public. Therefore, the criteria for recommending licensure according to section 11.62, Florida Statutes, is not met, and this report does not recommend mandatory licensure for environmental professionals.





III. Government Regulation of Professions or Occupations: When is it Needed?

A. Minimum Criteria for Proposing Regulation

This section is not specific to a review of the proposal to regulate environmental management. It is provided as background information concerning the theory and history of regulation. In particular, this is intended to inform the committee on statistical and historical evidence regarding the demonstrated effects of other regulatory efforts, and the extent to which licensure may come to be used for anticompetitive purposes, or may produce unintended effects. This information is not intended to substitute for, or conflict with, the standards set forth in section 11.62, Florida Statutes, but rather to supplement those standards with other relevant information which should be considered prior to initiating any regulatory scheme.

The only legitimate justification for imposing regulation is to protect the public. A desire to produce heightened "professionalism," or an effort to assure a "higher quality of work" is not -- in the absence of showing a significant danger to the public by unregulated activity -- sufficient to justify regulation.

Nor is it sufficient in most cases to allude to "potential" dangers. It is reasonable to assume that any unregulated activity which is (allegedly) a danger to the public will have resulted in numerous and significant actual damages -- by virtue of its already having been practiced in its unregulated form for years. If groups promoting the proposed regulation are unable to demonstrate multiple instances of significant harm which has already occurred, the argument that government needs to impose regulation in order to prevent harm is substantially rebutted.

In addition, even if harm can be shown (and a problem is thereby concluded to exist), that alone is not enough to justify the regulation. It must also be shown that the proposed regulation will substantially remove the problem and prevent the harm. It is pointless to impose regulation as a response to a demonstrated problem unless it can be concluded that the regulation will have the effect of solving or significantly alleviating the problem.

Therefore, in order to even consider recommending regulation, two (2) essential elements must be established:

(1) unregulated activity must be found to present a significant and clearly discernible danger to the public; and

(2) the proposed regulation must be seen as likely to substantially remove the danger.

In other words, first a problem must be shown to exist, then it must be shown that the regulation will substantially correct the problem. If conclusive evidence for either of these propositions is lacking, the regulation should not be imposed.[2]

B. Demand for Licensing

According to David Young,[3] there are two theories regarding the existence of licensing laws, their purpose, and who are the beneficiaries.

In the Public Interest theory of licensing, regulation is seen to be imposed for the benefit of the public. Presumably, such regulation is introduced due to public outcry or at the urging of consumers. This theory hypothesizes that by imposing regulation, a benevolent government purpose is at work, and that (according to Young): "regulators believe, rightly or wrongly, that efficiency or fairness -- or both -- will be enhanced."

Under this theory, the benefits of regulation center on the assertion that licensing provides the consumer information and protection not otherwise available. Licensure benefits consumers by providing assurance of minimum competency prior to the consumer selecting a practitioner, as well as providing an avenue (disciplinary hearings) to press grievances, should grievances develop.

The second theory of the purpose and benefits of licensing, is the Capture[4] theory of licensing. This theory suggests that professional groups ask for and use the government regulation for their own economic advantage. As Mr Young explains:

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[2] The New York State Bar Association, in its report: "New York State Regulatory Reform," indicates that even if the activity in question is an important one, regulation may not be needed. Their report states:

> (The) rationale for licensing may be inapplicable where:
>
> 1) customers are sophisticated and knowledgeable;
>
> 2) the providers are selected through skilled intermediaries competent to make their own judgements, such as public or private agencies, boards or supervisors;
>
> 3) competence itself is elusive because the factors relevant to good performance are controversial, hard to define, and incapable of precise workable definition;
>
> 4) the number or sources of the service are so large that state efforts to assure quality will be likely to be nugatory -- for example where a multitude of publications, advertisements and personnel of every kind tell the public what is the best diet, how to lose weight, or how best to invest money;
>
> 5) where fraud or unethical behavior rather than incompetence is the key problem, and ordinary legal processes may be far more effective than licensing in curbing abuses and less likely to shield malefactors.

[3] Young, David, The Rule of Experts: Occupational Licensing in America, Cato Institute, 1987.

[4] This theory was first advanced by the economist George Stigler in his article "The Theory of Economic Regulation," Bell Journal of Economics and Management Science, Spring, 1971

> In effect, they capture the regulatory apparatus and use it to restrain competition and raise income.

In this view, regulation's true purpose and effect is anti-competitive rather than benevolent. This theory contends that the primary purpose of licensure is to benefit the licensed professionals themselves. Naturally, under this theory, the professional groups do not admit (perhaps not even to themselves) their true purpose, and instead cloak it with pronouncements of their desire "to protect the public." Still, it is certainly possible that the professionals' efforts to establish licensure could actually evidence a genuine concern for the public -- and the fact that they would derive substantial benefits from reducing competition, and would receive more money for their services, is only a coincidence.

Additional argument in support of the "capture" theory is supplied by Walter Gellhorn in his article "The Abuse of Occupational Licensing."[5] He points out that licensing has only infrequently been imposed upon an occupation against its wishes.[6] According to Gellhorn:

> In many more instances, licensing has been eagerly sought -- always on the purported ground that licensure protects the uninformed public against incompetence or dishonesty, but invariably with the consequence that members become protected against competition from newcomers.

Proponents of the "Capture" theory point out that licensing limits the number of people who may engage in the regulated activity.[7] An economic principle generally known as the "Law of Supply and Demand" predicts that (other things being equal) any limitation imposed upon the supply of goods or services inevitably results in a higher cost for those goods or services. Therefore, regulation (to the extent it can be counted upon to restrict the number of practitioners)[8] will consistently have the effect of raising (either immediately or eventually) the costs of the regulated goods or services.

Thomas Moore of the Carnegie Institute of Technology conducted a survey of regulated occupations and businesses which indicated:

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[5] The University of Chicago Law Review, 1976

[6] He notes one example of the rare instance of unwelcome and unsolicited licensure imposition would be federal regulation of stockbrokers imposed in response to the financial scandals of 1929.

[7] In "The Effectiveness of Licensing: History, Evidence, and Recommendations," Law and Human Behavior, Vol. 7, 1983, Daniel Hogan states: "While little research exists on this point, the influence of licensing seems obvious, especially since its explicit purpose is to limit supply to those deemed qualified to practice."

[8] According to Hogan ("The Effectiveness of Licensing: History, Evidence, and Recommendations," Law and Human Behavior, Vol. 7, 1983), the researchers Carrol and Gaston, in their report to the National Science Foundation titled: Occupational Licensing, studied eight professions and found that "restrictive licensing significantly lowered the number of people licensed..."

> [T]he least restrictive types of regulations were imposed for the public welfare while the most restrictive types appear to have been established to benefit practitioners of the regulated occupations and businesses.[9]
>
> (emphasis added)

(In Moore's analysis, "least restrictive" refers to voluntary certification or registration without entry requirements, and "most restrictive" refers to mandatory licensing.)

> Moore goes on to state that establishing restrictions of entry primarily:
>
> benefits the practitioners who are in the industry at the time the restrictions are imposed. The more restrictive the regulations, the more practitioners will benefit.

Regarding the economic effects of licensure, he later adds:

> The higher entry standards imposed by licensing laws reduce the supply of professional services, causing the market to clear at a higher price. In effect, then, the costs of the higher standards are distributed throughout the state in the form of higher prices. Affluent consumers who can afford these higher prices are better off, because the higher standards provide them with more confidence in the quality of the services they purchase. Poor consumers, however, do not benefit, because they cannot afford the higher prices. The poor are net losers, because the availability of low-cost service has been reduced.
>
> (emphasis added)

In his book, The Rise and Decline of Nations, Mancur Olson of the University of Maryland described how this self-protective process works. As described by James Fallows in More Like Us (1989), Olson's theory states:

> Any society is more productive if every group in the society is exposed to competition -- but each group is better off if it's not. American quotas on imported sugar hurt America but help its sugar growers. Japanese laws forbidding chain stores hurt Japan but help its small shopkeepers.

Sometimes, Olson said, small groups can shield themselves from competition on their own, through private, informal, or even cultural means. According to Olson, (as described by Fallows):

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[9] Moore, Thomas, "The Purpose of Licensing," Journal of Law and Economics, October 1961.

> Big steelmakers can tacitly agree to raise their prices all at the same time. The caste system in India is a form of private action against competition, since it excludes most people from certain jobs. Prejudice against minority groups has the same effect.

But, Olson said, these private steps are always more effective if they are backed up with government action (mandatory licensure).

It nevertheless remains that even if one accepts the "Capture" theory as being the dominant motive force, regulation may still serve a valid, justified, and even necessary purpose -- protecting the public. So, with certain professions, the government has determined that the genuine and demonstrated potential for harm in unregulated activity is so great, and the potential for alleviating the harm by instituting regulation so clear, that the costs of regulation should be borne.

Unfortunately, even in the instances where the proposal for regulation is thereby properly justified, some research indicates that the regulation -- once enacted -- cannot always be counted upon to actually deliver its anticipated benefit. Several studies indicate that even though licensure may raise the quality of services delivered by licensees, it may not actually raise the quality of services received by the public. According to Sidney L. Carroll and Robert J. Gaston[10]

> The evidence available indicates that licensing tends to enhance the capabilities of the licensed professionals, resulting in better delivered quality.[11] Often, however, this is not reflected in better quality received in the society as a whole. It is the lower middle income classes and poor... who tend to be shortchanged and offered low quality or no service at all.

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[10] "Occupational Licensing and the Quality of Service," Law and Human Behavior, Vol. 1, 1983.

[11] A Federal Trade Commission study (Phelan, J.J., "Regulation of the Television Repair Industry in Louisiana and California: A Case Study," Staff Report to the FTC, 1974) disagrees even on the point that the more restrictive licensure scheme can be expected to produce more professional service. He examined the cost of TV repairs in 1) Louisiana, which licenses TV repairmen; 2) California, which merely registers TV repairmen; and 3) Washington, D.C., which has no regulations. The study found the incidence of fraud more frequent and prices 20 percent higher in Louisiana than in either of the other jurisdictions.

Because licensure tends to raise the costs of licensed goods or services,[12] as well as to reduce the number of practitioners available, it appears many consumers choose injurious self-treatment or go without help altogether.[13] Carroll and Gaston[14] have found that states with strict laws regulating plumbers have more people doing their own plumbing (as measured by per-capita retail sales of plumbing supplies). Where entry requirements for real estate brokers are strict, they found that houses tended to stay on the market longer.

Most incredibly, Carrol and Gaston discovered that accidental electrocutions are directly related to the restrictiveness of a state's licensing laws for electricians. In the seven most restrictive states, up to ten times more accidental electrocutions occurred.[15]

This perverse effect upon carefully calculated and well intended regulations may be ignored only at great peril by regulators considering adopting licensure requirements.

Finally, according to David Young, when considering a proposal to initiate regulation of a previously unregulated profession:

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[12] Carrol and Gaston state: "To our knowledge, theory has not been disconfirmed by evidence, and licensing has been shown repeatedly to have an upward price effect" (emphasis added). Carrol and Gaston cite numerous studies in support of this:

Arnould, R.J. and Friedland, T.S. "The Effect of Fee Schedules on the Legal Services Industry, The Journal of Human Resources, 1977;

Blair, R.D. and Rubin, S. Regulating the Professions, 1980;

Begun, J.W. Professionalism and the Public Interest, 1981;

Shepard, Lawrence, "Licensing Restrictions and the Cost of Dental Care," Journal of Law and Economics, 1978;

Perloff, J.M. "The impact of Licensing Laws on Wage Changes in the Construction Industry," Journal of Law and Economics, 1980;

White, W.D. "The Impact of Occupational Licensure of Clinical Laboratory Personnel," Journal of Human Resources, 1978;

White, W.D. "Dynamic Elements of Regulation: The Case of Occupational Licensure," Research in Law and Economics;

Pashigan, B.P. "Occupational Licensing and the Interstate Mobility of Professionals," The Journal of Law and Economics, 1979;

[13] In "New York State Regulatory Reform," by the New York State Bar, the report states:

> As a result of higher costs, those who cannot afford officially-approved services may do without any service at all, or have to resort to an unofficial underground network affording less protection than would have existed without the licensing laws. For example, it local religious or community organizations cannot afford to meet day-care requirements, children otherwise given good, but less than ideally required, care may get none at all, be left on the street or alone at home, or be left to the tender mercies of less honorable borderline operators.

[14] Carroll, S.L. and Gaston, R.J, Occupational Licensing, (Final Report to the National Science Foundation, 1977.

[15] "How Licensing Hurts Consumers," Business Week, November 28, 1977, pg. 127-129.

It is the policymaker's job to sift through arguments based on self-interest to discover the valid arguments affecting the interest of consumers.[16]

C. An Historical Perspective

In our current regulatory society, it appears that the idea that the individual knows what is best for himself has given way to the concept that it is society which can best judge. The belief that the consumer is not capable of evaluating the ability of a prospective professional employee, and then determining for himself the qualifications necessary for the job, is not new. However, a society so fully accepting this idea, and adopting it as government policy, is a relatively recent development.

In fact, the very idea of licensed occupations -- the practice of law, accounting, optometry, psychiatry -- is now accepted so unquestioningly that it is startling to realize how recent it is.[17]

According to James Fallows,[18] practitioners of almost every occupation now thought of as a profession organized themselves around the time of the Civil War. Dentists, in 1840, were the first. Medical doctors banded together soon after, in 1847.[19] A generation later, dozens of other groups had become licensed professionals: architects, accountants, lawyers, chemical engineers, and many more.

According to David Young,[20] before World War I, not a single state required its lawyers to have attended (let alone have finished) law school; and the American Bar Association asked only that prospective lawyers have finished high school before they took the bar exam.

It is worth noting that the practice of law in England never went through this shift. According to Young:

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[16] Young, David, The Rule of Experts: Occupational Licensing in America, Cato Institute, 1987.

[17] According to David Young, the early licensing movement met with considerable resistance. In the 1830's and 1840's, when the Jeffersonian/Jacksonian philosophy of laissez-faire was at its zenith, many consumers opposed state regulation. Also, according to David Hogan, the prevailing philosophy of the Jacksonian democracy emphasized minority groups, the underprivileged, the poor and the needy. It advocated a policy that allowed citizens maximum freedom of choice, and considered that a free and responsible society needed only the doctrine of "caveat emptor" (let the buyer beware) as public protection.

[18] Fallows, James, More Like Us, 1989.

[19] According to Daniel Hogan, in "The Effectiveness of Licensing: History, Evidence, and Recommendations," Law and Human Behavior, vol. 7, 1983, sporadic regulatory efforts in the field of medicine had been going on since 1639 (in Virginia), but by the mid-19th century: "the practice of medicine was open to virtually anyone who desired to hang out a shingle."

[20] Young, David, The Rule of Experts: Occupational Licensing in America, Cato Institute, 1987.

> There, law school is an alternative to college, not a course for college graduates only -- and in any event a degree is not strictly required for solicitors and barristers. It's hard to find evidence that the average standard of practice in America is higher than in England.

According to R.H. Shryock,[21] between 1911 and 1915 alone, 110 state or local statutes licensing 24 occupations were enacted. In medicine, licensing became mandatory in every state by 1900, and 22 states required both medical school diploma and successful passage of an exam.

Today, another surge of licensing laws has occurred. As of 1950, 73 occupations were licensed in one or more states, with 13 licensed in every state.[22] The passage of legislation has been so rapid since 1950 that 20 years later the health field alone licensed 30 different occupations, with 12 regulated in all states. According to a Department of Labor study,[23] almost 5000 different licenses, covering more than 500 different occupations, were available in one state or another by 1969. At that time, California and Illinois were the leading regulators, licensing more than 175 occupations each.

According to a 1990 study,[24] the number of different licensure categories has more than doubled, with over 1000 different occupations, trades, or professions being licensed.

Needless to say, the impact of licensing on the economy is substantial. As of 1976, licensing laws were estimated to affect directly a third to a fifth of the work force[25]. According to the Department of Labor, 25% of the employed labor force in some states is composed of licensed practitioners[26], and as of 1969, roughly 10% of the national income of the United States originated in occupationally licensed labor markets.[27]

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[21] Shryock, R.H., Medical Licensing in America, 1650-1965, 1967

[22] Council of State Governments, Occupational Licensing Legislation in the States: A Study of State Legislation Licensing the Practice of Professions and Other Occupations, 1952

[23] U.S. Department of Labor, Occupational Licensing and the Supply of Nonprofessional Manpower, 1969

[24] Occupational and Professional Regulation in the States: A Comprehensive Compilation, The National Clearinghouse on Licensure Enforcement, and Regulation (CLEAR), 1990

[25] "Pressure Builds to Improve Occupational Licensing by States," Behavior Today, August 23, 1976.

[26] "How Licensing Hurts Consumers," Business Week, November 28, 1977.

[27] Carroll, S.L. and Gaston, R.J, Occupational Licensing, (Final Report to the National Science Foundation, 1977

An astonishingly wide variety of "professional" practice is licensed in one state or another. The following sampling from a Department of Labor study illustrates the unexpected range of professions: aerial horse hunters, athletic exhibition agents, alligator hunters, astrologers, bedding cleaners, ice cream buyers, cactus plant agents, rainmakers, and photographers.

D. Mandatory Licensure, Registration, or Certification?

1. The Three Types of Regulation

If it is determined that regulation is necessary and justified, there is still the question of what sort of regulation should be imposed. Regulation can take any one of three forms:

1) Licensure (mandatory) -- This is a "practice act" form of regulation. Anyone wishing to practice the regulated activity must become licensed. Licensure also usually entails entrance requirements consisting of education, experience, or examination (or any combination thereof).

2) Registration (mandatory) -- This is also a "practice act" form of regulation, requiring anyone wishing to practice the regulated activity to become registered. It differs from (mandatory) licensure in that no (or only an absolute minimum of) entrance requirements are imposed, other than payment of a fee and provision of certain information. Sometimes a minimalist requirement such as provision of insurance or assurance of no criminal history is imposed, but education, experience, or examination requirements are generally not part of the regulatory scheme. If those sorts of entrance requirements are imposed, the regulation becomes, in effect, mandatory licensure.

3) Certification (voluntary) -- Certification is voluntary. That is, persons who are not certified may engage in the very same activity (practice) as someone who is certified -- however, they may not refer to themselves as certified (or refer to themselves by any other term which has been held as deceiving the public as to their qualifications or lack thereof). Certification usually imposes entrance requirements similar to licensure -- education, experience, and testing. This is what has been termed a "title act." A title act is a form of regulation which only restricts the use of a title, rather than prohibiting the practice of an activity.

Mandatory licensure is the most restrictive of the three, because it provides significant entry requirements prior to licensure, and prohibits the practice of the activity except for those who obtain licensure. Registration is the next most restrictive because it prohibits the practice of the activity except for those who obtain registration,

but does not impose significant entry requirements. Certification is the least restrictive because those who are not certified may still continue to practice the activity.

According to David Young, in 1989, 490 different occupations were licensed in one state or another, 643 different occupations were registered in one state or another, and 65 different occupations were certified in one state or another.

The "Sunrise Act" (section 11.62, Florida Statutes) provides guidance for determining which form of regulation to recommend or impose. The Sunrise Act requires that when regulation is imposed, it must be imposed at the lowest and least intrusive level which will serve the purpose.[28]

It is therefore necessary to return to the question of what specific purpose regulation serves, in order to determine what is the lowest form of regulation which will serve that intended purpose.

2. Specific Purposes of Regulation

a. David Young's Analysis

According to David Young (and as previously discussed), under the "public interest" theory of regulation the purpose is either to: (1) provide information not otherwise available; or (2) provide consumer protection, i.e. complaint investigation and discipline; or both.

Wesley C. Mitchell, in The Backward Art of Spending Money, states that consumers do not have the knowledge necessary to make a "wise" decision when buying the complicated goods and service offered for sale today. This amounts to an argument that the purpose of regulation is to remedy a lack of information.

Licensing, argues Mitchell, increases information by establishing minimum standards for entrants. In effect, all practitioners must meet certain minimum qualifications, for no unlicensed practitioners are permitted. The consumer therefore knows that practitioners of the licensed occupation possess a given degree of competence.

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[28] The Sunrise Act states:

> It is the intent of the Legislature:
>
> (a) That no profession or occupation be subject to regulation by the state unless the regulation is necessary to protect the public health, safety, or welfare from significant and discernible harm or damage and that the police power of the state be exercised only to the extent necessary for that purpose; and
>
> (b) That no profession or occupation be regulated by the state in a manner that unnecessarily restricts entry into the practice of the profession or occupation or adversely affects the availability of the professional or occupations services to the public.

However, this argument, particularly if used to support the choice of mandatory licensure, has at least two problems. The first problem is the assumption that this information is not otherwise available. It is, after all, not impossible for a consumer to gather the information necessary to protect himself. According to David Young, a consumer can acquire this information in several ways:

1) By frequently purchasing the goods or services;

2) By drawing on the experience of friends, relatives and neighbors;

3) By inferences drawn from the length of life of firms offering goods or services for sale;

4) From the sellers themselves, who have market incentives to provide consumers information on quality, often in the form of warranties.

However, it must be said that while these avenues for obtaining information exist, they have significant gaps and shortcomings. In a mobile society, citizens are often new to a community, and the first three avenues cited above for obtaining information would not be readily available. If information provision serves a critical need, regulation performs this service better than leaving people to their own devices.

Nevertheless, a second problem exists in attempting to establish the "lack of information" argument in support of mandatory licensure. A system of certification would furnish at least as much information as licensing. Under a certification arrangement, those practitioners who desire to be certified and who could meet certain standards (usually including the passing of an examination) would be given a certificate of approval. A system of regulation employing voluntary certification completely satisfies the purpose of information provision. However, it leaves it up to the consumer to choose whether he would prefer to employ an uncertified practitioner (perhaps at a lower cost) whom he personally believes to be competent despite his not having formally "proved" his competency to the state. As the economist Milton Friedman writes:[29]

> The usual arguments for licensure, and in particular the paternalistic arguments for licensure, are satisfied almost entirely by certification alone. If the argument is that we are too ignorant to judge good practitioners, all that is needed is to make the relevant information available. If, in full knowledge, we still want to go to someone who is uncertified, that is our business.

[29] Friedman, Milton, Capitalism and Freedom, 1962

So, even if lack of information were to be accepted as a sufficient and justifiable argument for regulation, certification would still be preferable to mandatory licensure because it would provide the same benefit at a lower and less intrusive level.

If the "lack of information" argument provides insufficient support for mandatory licensure, perhaps the argument could be advanced that the other part of Young's theory -- consumer protection (in the form of complaint processing and discipline provision) -- is the more important motive force which justifies regulation.[30]

This "complaint/discipline provision" argument essentially maintains that where lack of competence or fraudulent activity would threaten the public, regulation serves to protect the public by assuring competency and preventing fraud.

The effectiveness of regulation in assuring competency is dependent upon the specific provisions which establish education, experience, or examination requirements (and the extent to which these specific requirements actually serve to assure competency). These provisions vary from practice act to practice act. One look at the many instances in which licensed individuals (who have, after all, complied with education, experience and testing requirements) have nevertheless performed substandard or incompetent work, and it is clear that such requirements do not assure protection. However, it can be argued that without these requirements, incompetent activity would be even greater.

The effectiveness of regulation in protecting against fraud has been called into question as recently as 1982, in New York. In 1982, the New York State Bar Association issued a report entitled "New York State Regulatory Reform." The report declared:

> As an anti-fraud measure, licensing is frequently ineffective... If unscrupulous characters are prepared to risk criminal penalties, the additional sanctions for failure to obtain a license can hardly be a meaningful deterrent. Indeed, it is often even harder to prosecute a malefactor for fraud if the party is licensed, because of an assumption that the person is honest or else the license would have been revoked.
>
> The presence of a license often gives the client a false sense of security where the State cannot insure that a licensed person or agency will act honestly -- merely that paper criteria are met.

[30] This argument will hereafter be referred to as the "complaint/discipline provision" argument.

Indeed, licensing often gives an imprimatur of competence to the licensee which encourages reliance by the public where this may be unjustified.

Still, while regulation may not prevent licensees from committing fraud or a criminal act, so long as disciplinary avenues are available and effectively prosecuted, regulation (in the form of license or registration revocation) should prevent the licensee from repeatedly victimizing the consumer.

Nevertheless, it appears that whatever its merits in justifying some form of regulation,[31] the "complaint/discipline provision" argument cannot be established as support for mandatory licensure. For, just as certification satisfies the "lack of information" argument, but at a lower and less intrusive level, registration satisfies the "complaint/discipline provision" argument, but at a lower and less intrusive level. Registration does not preclude a full complaint-processing, discipline-providing support system. Registration serves to allow anyone who wishes to practice, but will still "weed out" those who are found to be incompetent or unscrupulous.

If the "lack of information" argument cannot justify mandatory licensure (because certification is preferable), and the "complaint/discipline provision" argument cannot justify mandatory licensure (because registration is preferable), what can justify mandatory licensure?

b. Thomas Moore's Analysis

It may be necessary to consider another analyst's theory of regulatory justification. According to the economist, Thomas G. Moore, three rationales based on public interest arguments may be advanced as to why certain occupations should be licensed:

1) Lack of information or misinformation,

2) Social costs of lack of regulation being higher than private costs, and

3) Society's knowing better than the individual what is best for the individual.

We have already considered the merits of "lack of information" as regarding its ability to serve as support for mandatory licensure. "Lack of information" does not, by itself, support mandatory licensure.

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[31] It should be emphasized that the natural operation of the marketplace serves to eliminate incompetent or unscrupulous practitioners through the information dissemination avenues discussed above, avenues which are available to consumers in the absence of regulation. To the extent that the marketplace functions adequately in this area, complaint processing and discipline may be seen as relatively superfluous.

Moore's second rationale holds that licensing may sometimes be necessary when social costs are greater than private costs. Social costs comprise all the costs or risks which arise from a transaction. Private costs are those costs which are borne only by the parties to the transaction. According to Moore:

> The medical profession is often cited as a case where social costs are greater than private costs. It is usually said that "incompetent" physicians may diagnose a disease incorrectly and thus start an epidemic. Only in the case of a few occupations, such as physicians, veterinarians, and pharmacists, is it possible to argue that social costs are greater that private costs. For a great many of the occupations that are licensed, it is unlikely that social costs are larger than private costs.

It may be that Moore should add some other professions to his list. In the construction field, for example, the potential sometimes exists for great public harm (e.g. collapse of a public building) resulting from incompetent work.[32] It may be legitimate in the construction field to view social costs (and concerns) as eclipsing private costs in some instances.

Finally, Moore considers the argument that society is a better judge than the individual concerning what is good for him. Moore states that this "is the only argument that is both logically consistent and statistically significant." In other words, while this argument may not often be overtly advanced as justification for licensure, it is the only explanation which logically explains the widespread public reliance upon, and legislative enactment of, licensing laws. However, Moore goes on to state:

> This approach raises great philosophical problems. If the individual is not the best judge of what is best for him, then what is best and who is to decide? According to this approach, all activity can and should be regulated by the body that does know what is best for the individual.

So, with Moore's analysis, once we determine that regulation is necessary, and seek justification of mandatory licensure, we are left with:

1) A discredited argument ("lack of information"),

2) An argument of only narrow and rare application (public harm as a compelling expectation), and

3) An argument which has great philosophical problems in a society which is not comfortable with government telling individuals what is best for them.

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[32] It should be noted that the same does not hold true for fraud. The damages or costs for fraud are basically limited to the parties to the transaction, and no case appears to be available alleging "public harm" as a result of fraud.

c. What Justifies Mandatory Licensure?

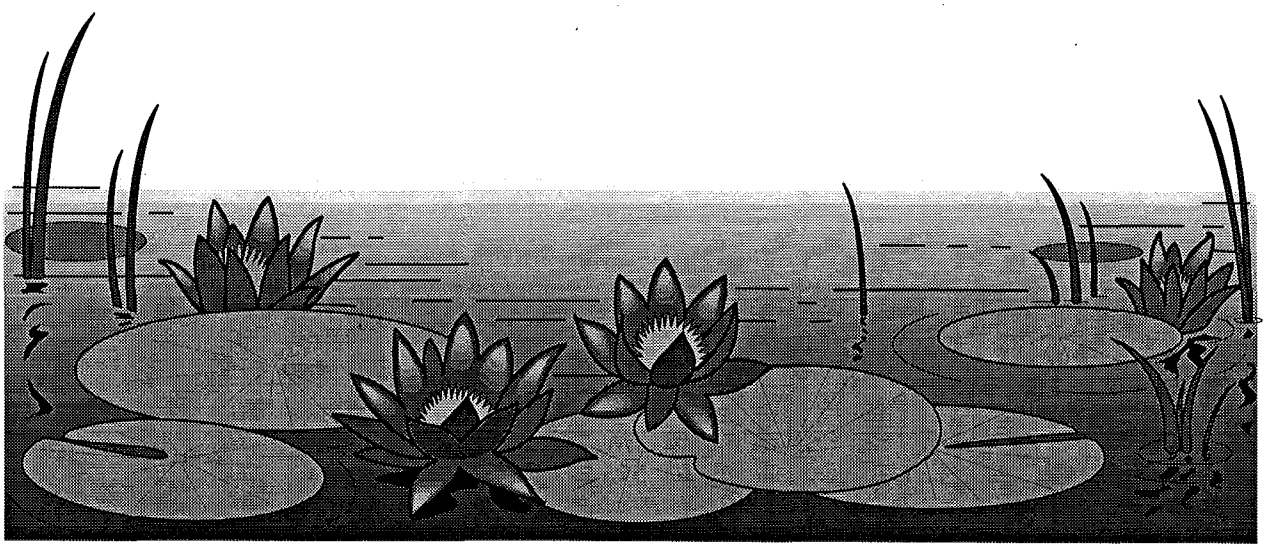
While it is clear (both from this analysis and from the plain language of the Sunrise Act) that certification and registration are to be preferred over mandatory licensure, there may still be times when mandatory licensure is justified. Under Moore's analysis, mandatory licensure is justified:

1) If it is determined that significant public harm can be expected to occur if the privately-arranged unregulated practice were to continue, mandatory licensure can be justified (Moore's rationale #2); or

2) If it is determined that we -- as a society -- cannot trust the members of our society to make decisions regarding what is best for them, mandatory licensure can be justified (Moore's rationale #3).

A third situation, not examined or discussed by Moore, but implicit in Young's analysis, can also support mandatory licensure. If both of the elements of Young's argument in support of "public interest" licensing were established, that is, if there was a compelling need for information (which certification by itself could provide), and a compelling need for complaint processing and discipline (which registration by itself could provide) -- then mandatory licensure could be recommended.

It is important to understand that both elements must be established in order to recommend mandatory licensure. The need for provision of information (on competency) must be compelling and the need for the government (as opposed to the marketplace) stepping in and eliminating below-standard practitioners must be equally compelling. This scenario serves to justify mandatory licensure because in such an instance, neither certification nor registration singly provide the benefits or fulfill the needs. Their benefits must be combined to achieve the purpose. And, when the attributes of certification and registration are combined, you have: mandatory licensure.



IV. Findings

A. An Overview of the Practice of Environmental Professionals

The proposal under review defines an environmental professional as anyone who engages in "environmental management." "Environmental management" is defined as the practice of "collection, analysis, and interpretation of scientific data" involved in the preparation or promulgation of various specifically enumerated assessments or evaluations relating to environmental concerns.

Presently, although persons performing environmental management are sometimes licensed in some professional field (engineering, industrial hygiene, landscape architecture, land surveying, geology, law, etc.) or have academic degrees in areas not professionally licensed (biology, chemistry, forestry management, ecology, etc.), there is no state licensure regulation of these individuals, as "environmental professionals." Instead, anyone wishing to perform environmental professional services may do so, providing his employer or client is satisfied that he is qualified for the job.

The proponents of the regulation have indicated that the largest portion of employment market for environmental professional services exists primarily with state or local governments agencies, and with land development and construction interests. The proponents also assert that without licensure, the state or local agencies, and the development and construction interests which employ environmental professionals are often do not have the information or background to evaluate the professional qualifications of those whom they would hire.

Examples of some of the specialized skills and/or knowledge required for the major categories of environmental management works are provided below:

Natural Resource Management Plans:

> This category requires specific knowledge of natural systems -- their interaction with each other, the effects of human interaction on natural systems, and the effects of abiotic (non-living) factors on natural systems. It requires the ability to properly identify existing key and/or protected species. It requires knowledge of habitat requirements, nutrient/food requirements and abiotic requirements for existing, key and/or protected species. It also requires knowledge of the specific conditions needed to maintain a specific habitat and the skills to provide the needed services. For example, Pine-Oak scrub habitat must be burned by an act of nature, or by humans, every 20 to 70 years. If burned less frequently it will become a low hammock. Whereas, if burned more frequently, it will become an Oak-Palmetto scrub habitat.

Interpretative Reports on Environmental Data:

This category requires specialized training in the proper identification of existing key and/or protected species, and knowledge of the specific habitat, food/nutrient, and abiotic conditions required by existing species. It requires specialized knowledge and skills to develop and implement sampling and/or monitoring procedures which provide an accurate and representative sampling of the target habitat species. It also requires the ability to analyze available environmental data and to draw valid conclusions based on the data.

Risk Assessments:

This category requires specialized training in the identification, containment, cleanup and post cleanup monitoring related to environmental contamination. This category requires specialized knowledge and skills related to the analysis of existing and potential impacts of hazardous materials.

Wetland and Habitat Creation, Restoration, Mitigation, or Enhancement Plans, Monitoring Plans and Reports:

This category requires knowledge of specific requirements - both biotic and abiotic necessary for successful habitat creation, mitigation, restoration, or enhancement. Specialized knowledge of habitat and food requirements for key species is required. This category also requires specialized knowledge and skills to develop, and implement related monitoring procedures which accurately monitor the success of the wetland or other habitat. The category also requires the knowledge to accurately analyze collected data and to form valid conclusions based on the data.

Examples of services which are performed by Environmental Professionals specializing in the "natural" environment include:

1) Environmental Assessments and Impact Statements;
2) Comprehensive Environmental Site Assessments for Land Development Projects;
3) Environmental Site Feasibility Studies;
4) Environmental Site Selection Analysis;
5) Environmental Planning for Land Development Projects (pre-master planning);
6) Wetlands Evaluations;
7) Wetland Limit and Jurisdictional Determinations;
8) Wetland Mitigation Plans;
9) Uplands Evaluations;

10) "Protected" Species Evaluations and Surveys;
11) Environmental Permitting; and
12) Water Quality Monitoring Plans

Examples of services which are performed by Environmental Professionals specializing in the "physical" environment include:

1) Domestic and Industrial Discharges as they impact receiving environments;
2) Property Assessments/Site Characterization;
3) Transactional Audits;
4) Contamination Assessments/Remedial Action Plans;
5) Site Monitoring/Baseline Surveys;
6) Risk Assessments/Management;
7) Discharge Permitting and Compliance Monitoring;
8) Solid Waste Characterization, Recycling, Reduction Plans;
9) Spill Planning and Emergency Preparedness;
10) Industrial Facility Compliance Evaluations; and
11) Underground Storage Tank Investigations

In 1993, the Florida Association of Environmental Professionals (FAEP) had a total membership of 650 environmental practitioners. The proponents estimate that approximately 1,250 Environmental Professionals would be expected to apply each year within the first five years of the establishment of regulation. This would amount to over 6,000 licensed environmental professionals within that five-year period.

Research completed by the Federation of Environmental Professionals (FEP) identifies "more than 90 'types' of professional environmental credentials offered by 60 distinct providers."[33] Several tables from that same issue are presented, describing various licensure and academic credential programs available across the country:

Table #1 Environmental practice credentials

Table #2 Engineering credentials

Table #3 Geology and soil-science related credentials

Table #4 Chemistry, biology, ecology and other science credentials

Table #5 Occupational/environmental health and safety credentials

[33] "Survey: Multiple Credentials Dilute Environmental Professionals' Status," Hazmat World, June 1993

Table 1. Environmental practice credentials - professional

Issuer	Title	Description	Requirements	Status/ Type	Comment/ first issue	Number issued
National Association of Environmental Professionals	CEP	Certified Environmental Professionals	A = BS, Q = 9 yrs. w/ 5 in supervisory responsibilities, D, M	C/2	A lot of work, high standards & a long process/1978	200+
National Registry of Environmental Professionals (NREP)	REM	Registered Environmental Manager	A = BS, Q = 3 yrs., T	C/3	Claimed to be NREP's highest credentials/1988	†
(Note: NREP has registered more than 8000 persons in 8 types of credentials.)	RES	Registered Environmental Scientist	A = BS, Q = 3 yrs., T	E/3	1992	†
	REPA	Registered Environmental Property Assessor	A = BS*, Q = 2 yrs., T * waived w/AEP	D+/3	1988	†
	CEA	Certified Environmental Auditor	A (see REPA), Q = 2 yrs., T	E/3	1988	†
	REP	Registered Environmental Professional	A = BS, Q = MS + 3 yrs., or BS + other credentials	E/3	1988	†
California EPA	REA	Registered Environmental Assessor	A = BS, Q = 5 yrs., D	B-/1	Necessary for some California EPA reports/1987	3,500
Environmental Assessment Association (EAA)	CER	Certified Environmental Reviewer	Q, T, M	E/3	Low standards/1989	
	CES	Certified Environmental Specialists	Q, T, M	E/3	1989	
NASHP	PEA	Professional Environmental Auditor	A = BS, Q = 2 yrs., T* waivers based on A & O	E/3	1991	
Neveda, Bureau of Chemical Hazards Management	CEM	Certified Environmental Manager	A = BS, Q, T	A/1	Developed with NEHA/1991	400
	HWMS	Hazardous Waste & Materials Specialist	Less extension, but similar to CEM	B/	(see CEM)	9
FEAA/NREP	CPEA	Certified Professional Environmental Assessor	*A = BS, Q* = 3 yrs., T *waivers based on A & O	D/2	Refined extension of REPA/Spring 1993	n/a
A&WMA/IBPEP	?	?	A = BS, Q = 5 yrs., T	?/2	International certification?/1993	n/a

REQUIREMENTS: Qualifications and experience required of applicants seeking the credential. The letter designations used under "Requirements" are explained below. If a particular letter designation was omitted, there is no requirement under that category. **A**-Education requirements (i.e., B.S., etc.); if omitted, there is no prerequisite academic requirement. **Q**-Related professional experience, including number of years (for example, Q=3 yrs..). **T**-Test (exam) must be passed to obtain the certification. **D**-Considerable documentation of experience is necessary. **M**-Credential documentation of experience is necessary. **C**-Issuer's courses must be completed to obtain the credential. **F**-Financial assurance requirements (contractors).

STATUS: Level of recognition received by the credential in environmental practice as observed by FEP. The letter designations used are explained below: **A**-Generally required in broad applications of EP practice. **B**-Occasionally (-) to often (+) required in specific applications of EP practice. **C**-Sometimes recignized in broad applications of EP practice. **D**-Sometimes recognized in specific applications of EP practice. **E**-Seldom recognized or recognition unknown in EP practices.

TYPE: Identifies classification of issuer as **1**-government (usually state); **2**-professional membership association; or **3**-non-member credentialing board.

Environmental practice credentials - sub-professional/other

Issuer	Title	Description	Requirements	Status/ Type	Comment/ first issue	Number issued
National Registry of Environmental Professionals	ET	Environmental Technician	A	E/3		†
	AEP	Associate Environmental Professional	A = 2 yrs. college, T	E/3	AEP substitutes for A & Q on REPA & CEA	†
	RELA	Registered Environmental Lending Analyst	A, Q, T	E/3		†
EAA	CEI	Certified Environmental Inspector	T, M	E/3		

REQUIREMENTS: Qualifications and experience required of applicants seeking the credential. The letter designations used under "Requirements" are explained below. If a particular letter designation was omitted, there is no requirement under that category. **A**-Education requirements (i.e., B.S., etc.); if omitted, there is no prerequisite academic requirement. **Q**-Related professional experience, including number of years (for example, Q=3 yrs..). **T**-Test (exam) must be passed to obtain the certification. **D**-Considerable documentation of experience is necessary. **M**-Credential documentation of experience is necessary. **C**-Issuer's courses must be completed to obtain the credential. **F**-Financial assurance requirements (contractors).

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Table 2. Engineering-related practice credentials - professional

Issuer	Title	Description	Requirements	Status/ Type	Comment/ first issue	Number issued
American Academy of Environmental Engineers	DEE	Diplomate Environmental Engineer	A = BS, Q = 8 yrs., PE, T	D/2	Must be a PE to obtain/1955	
American Institute of Chemists	CChE	Certified Chemical Engineer	A = BS, Q, certification units	?/2		
State Board/Board of Registered Professional Engineers & Land Surveyors (BRPELS)	PE	Professional Engineer	A = BS Engineering, Q = 4 to 10 yrs. (experience can be substituted for academic requirements and *vice versa*), T	A/1	State license. Often referenced credential for environmental practice, but does not evaluate or require environmental competence.	60,000
	EIT	Engineer-in-Training	A = BS, (see PE)	see comment	Prerequisite for PE exam	50,000
National Institute for Certification of Engineering Technologists (NICET)	CET	Certified Engineering Technologist	A = BS, Q, T	D/3		

REQUIREMENTS: Qualifications and experience required of applicants seeking the credential. The letter designations used under "Requirements" are explained below. If a particular letter designation was omitted, there is no requirement under that category. **A**-Education requirements (i.e., B.S., etc.); if omitted, there is no prerequisite academic requirement. **Q**-Related professional experience, including number of years (for example, Q=3 yrs..). **T**-Test (exam) must be passed to obtain the certification. **D**-Considerable documentation of experience is necessary. **M**-Credential documentation of experience is necessary. **C**-Issuer's courses must be completed to obtain the credential. **F**-Financial assurance requirements (contractors).

STATUS: Level of recognition received by the credential in environmental practice as observed by FEP. The letter designations used are explained below: **A**-Generally required in broad applications of EP practice. **B**-Occasionally (-) to often (+) required in specific applications of EP practice. **C**-Sometimes recognized in broad applications of EP practice. **D**-Sometimes recognized in specific applications of EP practice. **E**-Seldom recognized or recognition unknown in EP practices.

TYPE: Identifies classification of issuer as **1**-government (usually state); **2**-professional membership association; or **3**-non-member credentialing board.

Engineering-related practice credentials - sub-professional/other

Issuer	Title	Description	Requirements	Status/ Type	Comment/ first issue	Number issued
NICET	AT	Associate Engineering Technologist	A , Q, T	?		
	CT	Certified Engineering Technician	A, Q, T	?		

REQUIREMENTS: Qualifications and experience required of applicants seeking the credential. The letter designations used under "Requirements" are explained below. If a particular letter designation was omitted, there is no requirement under that category. **A**-Education requirements (i.e., B.S., etc.); if omitted, there is no prerequisite academic requirement. **Q**-Related professional experience, including number of years (for example, Q=3 yrs..). **T**-Test (exam) must be passed to obtain the certification. **D**-Considerable documentation of experience is necessary. **M**-Credential documentation of experience is necessary. **C**-Issuer's courses must be completed to obtain the credential. **F**-Financial assurance requirements (contractors).

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TYPE: Identifies classification of issuer as **1**-government (usually state); **2**-professional membership association; or **3**-non-member credentialing board.

Table 3. Geology and soil science-related practice credentials - professional

Issuer	Title	Description	Requirements	Status/ Type	Comment/ first issue	Number issued
State Professional Board of Geology	PG	Professional Geologist	A = BS Geology, Q, T^ ^exceptions	B+ to C/1	Offered in 19 states. Growing in importance with groundwater pollution	
American Institute of Professional Geologists	CPG	Certified Professional Geologist	A = BS Geology, Q, D, M	D/2	Long review ocess/1963	8,000
Association of Engineering Geologist	CEG	Certified Engineering Geologist	A = BS, Q, T	D/2	High standards/1957	
American Institute of Hydrology	PH	Professional Hydrologist or Hydrogeologist	A = BS with hydrology emphasis, Q, T, M	C/2	1981	
Association of Groundwater Scientists and Engineers, National Ground Water Association	CGWP	Certified Groundwater Professional	A = BS, Q = 7 yrs., D, M	D/2	Rigorous review of hydrogeology experience/1985	
American Registry of Certified Professionals in Agronomy, Crops & Soils (ARCPACS)	CPSS	Certified Professional Soil Scientist	A = BS, Q = 5 yrs., T^ ^exceptions based on education	?	Specialist and classifier categories available/1977	
	CASS	Certified Associate Soil Scientist	A, Q, T	?		?

REQUIREMENTS: Qualifications and experience required of applicants seeking the credential. The letter designations used under "Requirements" are explained below. If a particular letter designation was omitted, there is no requirement under that category. **A**-Education requirements (i.e., B.S., etc.); if omitted, there is no prerequisite academic requirement. **Q**-Related professional experience, including number of years (for example, Q=3 yrs..). **T**-Test (exam) must be passed to obtain the certification. **D**-Considerable documentation of experience is necessary. **M**-Credential documentation of experience is necessary. **C**-Issuer's courses must be completed to obtain the credential. **F**-Financial assurance requirements (contractors).

STATUS: Level of recognition received by the credential in environmental practice as observed by FEP. The letter designations used are explained below: **A**-Generally required in broad applications of EP practice. **B**-Occasionally (-) to often (+) required in specific applications of EP practice. **C**-Sometimes recognized in broad applications of EP practice. **D**-Sometimes recognized in specific applications of EP practice. **E**-Seldom recognized or recognition unknown in EP practices.

TYPE: Identifies classification of issuer as **1**-government (usually state); **2**-professional membership association; or **3**-non-member credentialing board.

Table 4. Chemistry, biology, ecology and other related sciences - professional

Issuer	Title	Description	Requirements	Status/ Type	Comment/ first issue	Number issued
Society of Wetland Scientists (SWS)	PWS	Professional Wetland Scientist	A, Q, T	?/2	May be recognized by the Army COE, SWS has 3,800 members	
	WPIT	Wetlands Professional in Training	A, Q, T	?/2	May be recognized by the Army COE, SWS has 3,800 members	
American Fisheries Society	CFS	Certified Fisheries Scientist	A, Q, T			
	AFS	Associate Fisheries Scientist	A, Q, T			
Society of American Foresters	CPF	Certified Professional Forester	A, Q, T			
Wildlife Society	CWB	Certified Wildlife Biologist	A, Q, T			
	AWB	Associate Wildlife Biologist	A, Q, T			
Ecological Society of America	CSE	Certified Senior Ecologist	A, Q, T			
	CEE	Certified Environmental Ecologist	A, Q, T			
	CAE	Certified Associate Ecologist				
American Board of Toxicology	CGT	Certified in General Toxicology	A, Q, T	D		
American Institute of Chemists	CPC	Certified Professional Chemist	A, Q, certification units		1970	
American Meteorology Society	CCM	Certified Consulting Meteorologist	A, Q, T	B		
	SARTW	Seal of Approval/Radio and TV Weathercasting				
American Society of Agronomists	CA	Certified Agronomist	A, Q, T			

REQUIREMENTS: Qualifications and experience required of applicants seeking the credential. The letter designations used under "Requirements" are explained below. If a particular letter designation was omitted, there is no requirement under that category. **A**-Education requirements (i.e., B.S., etc.); if omitted, there is no prerequisite academic requirement. **Q**-Related professional experience, including number of years (for example, Q=3 yrs..). **T**-Test (exam) must be passed to obtain the certification. **D**-Considerable documentation of experience is necessary. **M**-Credential documentation of experience is necessary. **C**-Issuer's courses must be completed to obtain the credential. **F**-Financial assurance requirements (contractors).

STATUS: Level of recognition received by the credential in environmental practice as observed by FEP. The letter designations used are explained below: **A**-Generally required in broad applications of EP practice. **B**-Occasionally (-) to often (+) required in specific applications of EP practice. **C**-Sometimes recognized in broad applications of EP practice. **D**-Sometimes recognized in specific applications of EP practice. **E**-Seldom recognized or recognition unknown in EP practices.

TYPE: Identifies classification of issuer as **1**-government (usually state); **2**-professional membership association; or **3**-non-member credentialing board.

Table 5. Occupational/environmental health and safety - professional

Issuer	Title	Description	Requirements	Status/ Type	Comment/ first issue	Number issued
American Board of Industrial Hygienists	CIH	Certified Industrial Hygienist	A = BS, Q = 4 yrs., T^, D	A/3	^Some reciprocity with BCSP/1963	5,000
	CIHT	as above, in training	as above	?		
	OHST	Occupational Health and Safety Technologist	A, Q, T	D		
Board of Certified Safety Professionals	CSP	Certified Safety Professional	A = BS (safety discipline), Q, T^	C+/2	^Some reciprocity with ABIH	
	ASP	Associate Safety Professional	as above	C+/2	as above	
National Environmental Health Association	RS	Registered Sanitarian	A = BS (Environmental Health/Engineering), Q, T	B- to D/2	State license in 16 states	5,000
	RHSP	Registered Hazardous Substance Professional	A = BS, Q = 3 yrs., T	C/	Developed under EPA grant/1989	1,200
Health Physicist Society/ABHP	CHP	Certified Health Physicist	A = BS, Q = 6 yrs., T	B/		
Institute of Hazardous Materials Management	CHMM	Certified Hazardous Materials Manager (multiple levels)	A = BS, Q = 3 yrs., T	C+/3	CHCM derivative originally issued by BIHCM/1983	3,500
Board of International Hazard Control Management (BIHCM)	CHCM	Certified Hazard Control Manager (multiple levels)	A = BS, Q = 4 yrs., T^ ^waived with extensive Q and MS	E/3	Board also issued CHMM/1976	2,600
World Safety Organization (WSO)	CHMS/ CHME	Certified Hazardous Materials Supervisor/ Certified Hazardous Materials Executive	CHMS/CHME, CSM/CSE require the following: A = BS, Q = 3-4 yrs., T	E/3	The WSO designation must proceed the title (WSO-CSM)/1975	
	CSM/ CSE	Certified Safety Manager/Certified Safety Executive				
	CST	Certified Safety Technician	A = BS (safety), Q = 5 yrs., T			
	CSSP	Certified Security and Safety Professional	A = BS, Q = 4+ yrs., T			
National Environmental Training Association	CET	Certified Environmental Trainer	Q, T, D	E/3		250
	AET	Associate Environmental Trainer				

B. The Regulatory Proposal

1. Legislative History

In 1988, preliminary efforts were undertaken by the Florida Association of Environmental Professionals (FAEP) to develop a legislative package aimed at regulating the practice of environmental professionals in Florida. This effort continued until December 1991 when a preliminary Practice Act for Environmental Professionals was developed. According to the proponents, the practice act has undergone six revisions since December 1991.

The House Business and Professional Regulation Committee began an interim project during the 1993-1994 legislative year which continues through the present and will be completed prior to the 1995 Legislative Session. No bills have ever been filed or considered.

2. Specific Provisions of the Proposal

The proponents provided a proposed practice act for environmental professionals as part of their response to the sunrise questionnaire. That proposed practice act is included as Appendix A.

According to the proposal submitted by the proponents, "environmental management" includes the term "professional environmental management" and means the collection, analysis, and interpretation of scientific data involved in the preparation or promulgation of the following:

(a) Natural and physical resource assessments including categorical exclusions, environmental assessments and environmental impact statements as required by the National Environmental Policy Act of 1969 (NEPA), environmental features analysis for site feasibility or selection, and environmental planning for land development projects;

(b) Assessments of the presence of threat of environmental contamination upon, in, or under real property, and planning, designing, or implementing remedial activities to address such environmental contamination;

(c) Surface water and wetland evaluation including jurisdictional determinations, wetland quality evaluations, wetland mitigation, creation, preservation, or restoration plans, and lake management plans;

(d) Upland evaluations, including protected species identification, protected species management plans, and upland habitat management planning, evaluation, and restoration; and

(e) Evaluation of domestic and industrial discharges, impacts of such discharges on air, soil, surface and groundwater resources, and monitoring pollution prevention, and waste reduction plans for such discharges.

The proposal further states that "Environmental Management" does not include the management of agricultural resources "in the ordinary course of these activities", except as such activities require environmental permits.

The proposed legislation also provides that some persons, including employees of state or local agencies, may be exempted under some circumstances. As stated in the proposal:

> The following persons are specifically exempt from licensure provisions provided their work is reviewed and/or prepared under the supervision of an environmental professional, or other professional to the extent that the supervision meets the standards adopted by rule of the board:
>
> 1) Officers and employees of the State of Florida, water management districts, or other local or regional governmental entities practicing solely as such officers or employees.
>
> 2) Employees of a firm, corporation, or partnership who are the subordinates of the person in responsible charge, licensed pursuant to this chapter, and are acting within the scope of their employment.

The proposal sets forth three alternate paths to licensure:

1) The applicant could show "proof of certification by a board approved organization;" or

2) The applicant could show that he has a four year degree in "the natural or physical sciences," and five years of environmental management experience, three years of which would be work experience under a licensed environmental professional; or

3) Five years experience in responsible charge of environmental management work.

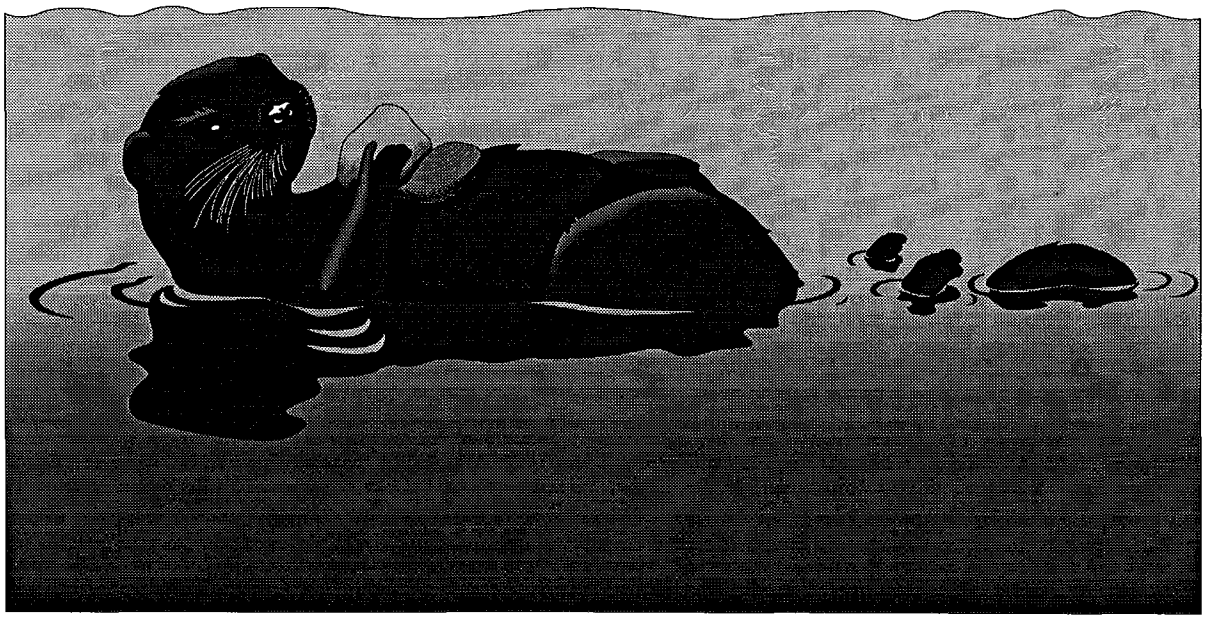
According to the proposal, paths (2) and (3) would "close" after one year. This, in itself, represents a problem. The only path remaining would be a path requiring the person to obtain certification from any one of several private organizations. It is entirely improper and inappropriate for government to require licensure in order to practice a profession, and then delegate to <u>any</u> private organization the sole authority

to determine who shall be licensed. If such "gate-keeping" authority were delegated to a private organization -- or organizations -- the government will have "given away" its ability to effectively address the complaints of constituents who allege that the private licensing authority is unfairly denying them licensure.

It is true that certification by a private organization may be allowed to suffice as an alternative choice in lieu of a government offered and administered certification plan. The problem comes in when certification by various private organizations is the sole path available. Then, the state has lost the ability to assure that licensure is not being unfairly withheld from qualified persons. If regulation is recommended, this problem would have to be addressed.

The proposed regulation would create a Board of Environmental Professionals. There is also a provision for the board to submit to the Legislature by September 1, 1997, a report on the issues of licensure qualifications, including possibly recommending a certification examination, or an internship qualification path.

The proposal provides that the board shall establish by rule classifications of environmental professional licensure based on the specialties which exist in the field of environmental management. Such classifications shall include, but are not limited to, the natural sciences including wetland and upland habitats, wildlife management, the physical sciences including soil classification, pollutants and hazardous waste substances and materials, water quality, and air resources.



C. Current Regulation of Environmental Professionals

1. The Regulatory Situation in Florida

Presently, although persons performing environmental management may be licensed in some professional field (engineering, industrial hygiene, landscape architecture, land surveying, geology, law, etc.) or have academic degrees in areas not professionally licensed (biology, chemistry, forestry management, ecology, etc.), there is no state licensure or other regulation of these individuals, as "environmental professionals." Instead, anyone wishing to perform environmental professional services may do so, providing his employer is satisfied that he is qualified for the job.

While there is no mandatory certification in Florida, private organizations, including the National Association of Environmental Professionals, have voluntary certification plans. Some local jurisdictions "recognize" this voluntary certification in their permitting ordinances.

Prior to a local jurisdiction or state agency issuing an environmental permit, a plan for the construction, development, cleanup, wetland mitigation, etc., is submitted. Usually, this plan is required to be "sealed" (certified) by an engineer or other licensed professional. At least one local jurisdiction, Palm Beach County, allows a person certified as an environmental professional under one of the recognized voluntary certification plans to seal the plans. Specifically, that county's wetland protection ordinance provides that "all drawings or applications" must be sealed or certified by a licensed engineer, surveyor, architect, or "an environmental professional certified by the National Association of Environmental Professionals or the Florida Association of Environmental Professionals."[34]

It appears that most environmental management is practiced by land development and construction interests in preparing plans seeking environmental permits, and by local governments and state agency personnel who evaluate these applications.

a. Environmental Permitting in Florida

The area in which most persons performing environmental management services would be most active would presumably be in the application for, and issuance of, the various types of environmental permits. According to a 1989 House of Representatives report on the environmental permitting process, five departments (now four, with the merger of DNR and DER into a single department -- DEP) and two

[34] The Florida Association of Environmental Professionals has indicated that it does not, in fact, have a certification program.

commissions have some responsibility for environmental regulation. Five water management districts hold regulatory responsibilities on a regional level, as do the eleven regional planning councils. Most counties and cities also have land-use regulations.

The Department of Environmental Protection (DEP) holds primary responsibility for protecting Florida's environment. DEP issues a myriad of permits, including permits for: discharges into surface and ground water; dredge and fill; public water systems; stormwater runoff; water well construction; air quality;and solid and hazardous waste facilities. In addition to DEP, the Department of Community Affairs (DCA) has responsibility for growth management and review of comprehensive plans. The Department of Agriculture and Consumer Services (DACS) is responsible for the regulation of pesticides and aquaculture and for the protection of endangered native plant species. The Department of Health and Rehabilitative Services (HRS) regulates septic tanks and monitors drinking water.

All of these state agencies have some regulatory authority in the environmental area, and all of them issue environmental permits of some sort. These state agencies, as well as the regional planning and local governments, work with and employ, persons performing "environmental management services."

b. "Environmental Health Professionals"

Although there is no licensure of "environmental professionals" in Florida, there is one existing license slightly similar to the proposed "environmental professional" license. The Department of Health and Rehabilitative Services (HRS) licenses "environmental health professionals," pursuant to section 381.0101, Florida Statutes.

Under HRS Rule 10D-123.002, Florida Administrative Code, an "environmental health professional" is defined as:

> "...a person who is employed or assigned the responsibility for assessing the environmental health or sanitary conditions within a building, on an individual's property, or within the community at large.... (These persons perform such activities as inspections, evaluations, preparation of reports, analysis of data, interpretation of data and laboratory reports, consultations with other health professionals or the public regarding results of evaluations and sampling efforts, and the recommending of prescribed courses of action to alleviate unsanitary or hazardous conditions."

HRS has interpreted its rule requiring licensure to apply only to its own inspectors, and has designated two categories of environmental health professional: on-site sewage inspector; and public food establishment inspector. HRS has not certified any environmental health inspectors, to date.

2. The Regulatory Situation in Other States

There are no states with a mandatory licensure program for the broad category of Environmental Professionals. However, several states have a more narrow or limited regulation of some category within "environmental management."

California has a state-run "voluntary registration" program for "environmental assessors." Under the California law, an environmental assessor is someone employed by private industry who prepares assessments for the purpose of complying with worker, health, or environmental regulations relating to hazardous wastes. Apparently, while the state does run a registration (licensure) program, this licensure is voluntary, and is not required in order to practice the activity. According to information provide by the proponents, that program is 5 years old and has over 5000 Registered Environmental Assessors. The minimum requirement for registration is five years of experience, and the registration may be suspended or revoked "for cause."

In Nevada, the Nevada Bureau of Chemical Hazards Management oversees a certification program for the category of hazardous waste management. Enacted in 1987, the Nevada program has certified approximately 400 Certified Environmental Managers (CEM). According to the proponents, the Corps of Engineers has a voluntary program to certify those performing wetlands jurisdictional analyses.

D. Is Regulation Needed?

1. Does the Unregulated Practice of this Occupation Harm the Public?

The proponents submitted seven letters from members of their association which alleged knowledge of four specific instances of harm or incompetent practices by persons providing environmental assessments or otherwise practicing environmental management. These letters also contained non-specific assertions that they often worked with (or heard of) incompetent persons practicing environmental management. In addition to complaints about unlicensed persons practicing environmental management, several of the letters complained that the licensed engineers they worked with were incompetent or seriously unknowledgeable in some areas of environment management.

In addition to these specific allegations, the proponents alleged that more extensive environmental damage is likely to have occurred due to the unlicensed practice of environmental management, but noted great difficulty of establishing specific instances of harm due to their assertion that:

> Natural ecosystems rarely experience cataclysmic events....Instead, they decline slowly until they reach a new equilibrium, with the cause of the decline obscured by time.

Although the proponents did not provide a large amount of documentation of specific harm, they did indicate several types of problems which exist and which may, in some instances, be connected to the unregulated practice of environmental professionals. The proponents, citing a recent study of the success of wetland mitigation projects stated:

> The Florida Department of Environmental Protection has recently documented chronic problems with the success of permitted environmental restoration or mitigation projects, many of which can be traced to insufficient expertise and/or experience on the part of contractors and consultants. In addition, there is a significant component of the present work being conducted in the area of environmental audits for hazardous wastes which is suspect in its completeness and accuracy, and will be exposed through future litigation as problems become evident during land development activities....

The proponents went on in their response to sketch out a broad scenario regarding the potential for harm:

> Harm to the public has resulted from the assumption by the consumer of environmental professional services that an experienced, trained individual is available to answer questions, provide professional guidance, and design land alteration projects (such as housing developments and roadways) that ensure the long-term viability of Florida ecosystems and associated wildlife and compliance with state, federal, regional, and local permitting standards.
>
> This assumption is based upon the belief that people who use the title of "environmental consultant", "ecologist", "biologist", "environmental professional" or "environmental planner", among other terms, are, in fact, knowledgeable of Florida regulatory requirements and are trained and abide by a code of ethics that ensures appropriate and professional consideration of the needs of wildlife and natural plant communities of Florida as balanced against planned physical alterations such as excavation, filling, installation of roads and bridges, or treatment of stormwater or industrial or municipal wastes.
>
> This assumption is not valid. The present practice of environmental professionals in the State of Florida is unregulated. Anyone, trained or not, can use the above-referenced titles and present themselves as having expertise in subjects they really know little about.
>
> The harm to the private sector is as follows: Improper planning and management of natural or physical resources can lead to extra expense in permitting; or permitted projects which fail over time creating a liability for the landowner. Improperly or unidentified hazardous waste sites can

lead to potential contamination of persons or the environment. Mistakes in this area can result in land purchases based on the faulty assumption that a property is free of contamination or threat. Liability is imposed by law on landowners despite any lack of prior knowledge of contamination, or despite a due diligence inquiry regarding prior contamination.

Environmental and land use regulations such as the DRI process, create a market for specialized information requiring detailed analysis and appropriate protection of natural habitats and threatened and endangered plant and animal species. However, anyone may call themselves an "environmental professional" to provide data in documents such as the Application for Development Approval required under Sec. 380.06, F.S. Even if data is incorrect or biased, to allow development to occur where it shouldn't, the professional cannot be disciplined or lose their right to practice....

At one point in their response, when asked to cite instances of consumer injury resulting from the unregulated practice of environmental professionals, the proponents indicated that:

It is very likely that harm to consumers has occurred and will continue to occur in the future. Untrained environmental professionals consume large amounts of public and private funds while producing only bad advice that results in failed attempts to protect and restore Florida's environment. Florida's public relies on environmental laws and regulations to safeguard the environment. The environmental regulatory agencies are impaired in their function by having to rely on representations made by an individual presenting himself as a qualified professional. This weak link in the permitting process has caused many failures which may only come to light years after the permit has been issued. Further, agency resources are directed towards verification and correction of information identified as inaccurate during agency review, resources which could be better utilized.

(emphasis added)

In one response oriented to providing information on specific harm which might be linked to environmental management, the proponents stated:

In 1990, the Department of Environmental Regulation conducted a study on 119 wetland creation sites required by 63 permits. That study found a high rate of noncompliance with only four of the 63 permits in full compliance with the permit requirements. The ecological success rate of mitigation was only 27 percent.

When asked how many complaints have been filed with state or local agencies relating to incompetent or harmful activities by environmental professionals, the proponents indicated:

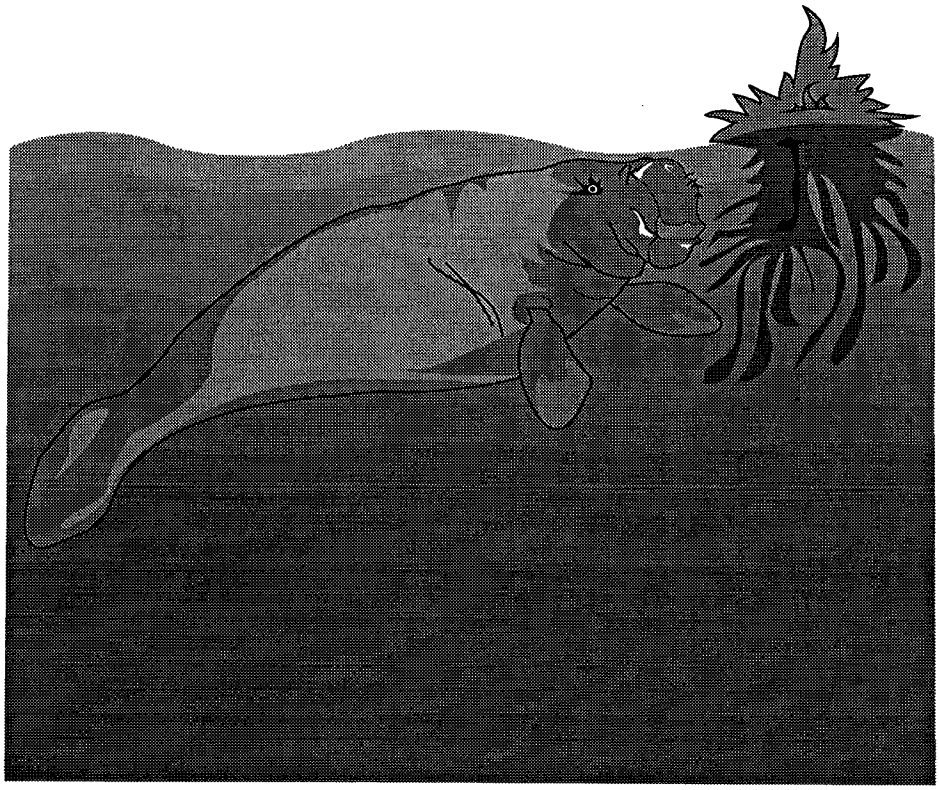
> We have no estimate of the number of complaints, but believe that even under regulation, the number of complaints would be low. The only person who can knowledgeably detect a failed effort by an environmental professional is another environmental professional. Currently, the only source of complaints is generally anecdotal information passed between professionals, as there is no formal complaint gathering by a state agency. Natural ecosystems rarely experience cataclysmic events, such as a poorly designed structure collapse. Instead they decline slowly until they reach a new equilibrium, with the cause of the decline obscured by time. The public understands the long term decline, but obviously has no opportunity to file a complaint. There is rarely a smoking gun, just the chronic smell of smoke.

Staff has been unable to identify any agency serving as a repository of complaints related to the unregulated practice of environmental professionals. To the extent that licensed professionals, such as engineers, perform "environmental management," complaints would be filed with the agency or board charged with regulation of that profession.

Since local governments and state agencies would employ environmental professionals in some instances, and evaluate the work of industry-employed environmental professionals in other instances, staff sent letters to each of the 67 counties, and to most of the state agencies likely to have an interest in the issue. The letter inquired as to their estimation of their capability of judging the competency or qualifications of such persons absent a mandatory licensure program. In addition, they were asked if they could identify any specific instances of harm resulting from the unregulated practice of environmental management, and their opinion on the issue of whether licensure of environmental professionals should be established. Staff also sent similar letters to development industry representatives and other interested parties.

Twenty-one (21) of the 67 counties responded. All 21 counties stated that they currently have no problem in selecting qualified people to perform environmental services. None of the 21 counties reported any instance of harm to the public in the unregulated practice of environmental management.[35] Five (5) counties (Collier, Clay, Broward, Pinellas, and Palm Beach) supported mandatory licensure of environmental professionals.

The Florida Association of Counties provided a letter expressing "concerns" about the effort to license environmental professionals. They provided several specific concerns relating to who would be exempted and who would not be exempted.



[35] The response from Pinellas County made reference to a major environmental problem with one public project in their jurisdiction. However, as described in the response, the problem was a failure to seek hazardous waste assessment rather than an instance of an incompetent opinion or assessment. Therefore, this seems more a local land purchasing procedure oversight, rather than a problem resulting from the incompetent practice of environmental management.

Six state agencies, one commission, and three Water Management Districts responded to a similar questionnaire directed toward state agencies which might have environmental management responsibilities. A summary of their responses is as follows:

	Does your agency need Licensure in Determining Employee Competence?	**Any Specific Instances Of Harm?**	**Do you Support Licensure?**
Department of Agriculture and Consumer Services	No	No	No
Department of Transportation	No	No	Yes
Department of Environmental Protection	No	No	Mixed (see below)
Division of Water Facilities			Yes
Div.of Air Resource Mgmt.			No
Div.of Waste Management			No
Div.of Recreation and Parks			No
Department of Management Services	No	No	Yes
Department of Community Affairs	No	No	No
Department of Administrative Services	No	No	No
Florida Game and Fresh Water Fish Commission	No	No	No
St. Johns River Water Management District	No	No	Yes
South Florida Water Management District	No	No	Ambivalent ("no" for their employees "yes" for the industry)
Southwest Florida Water Management District	No	No	No position

The respondents were given the opportunity to provide additional comments. In the comment section, those who opposed licensure consistently asserted that licensure requirements would cost more to themselves and the public. As one respondent stated: "Licensure would likely drive up the cost of doing business without appreciable benefit to the community."

In addition to government agencies, staff surveyed the opinion of groups identified as interested parties by the proponents, as well as the opinion of development and construction interests. The input of those who responded is as follows:

	Need licensure To Assist Themselves?	**Any Specific Instances Of Harm?**	**Do You Support Licensure?**
Florida Fruit and Vegetable Association	No	No	No
Association of Florida Community Developers			
Environmental Services, Inc.	No	Yes	Yes
American General Land Dev.	No	No	No
Amelia Island Plantation	No	No	No
Florida Citrus Mutual (A voluntary cooperative association whose membership consists of 11,956 active Florida citrus growers)	No	No	No
Florida Transportation Builders' Association (A trade association representing road building contractors, approx. 250 members)	No	No	No
Florida Forestry Association	No	No	No
Society of American Foresters	No	No	No
Florida Engineering Society	No	No	No
Construction Coalition (A construction trade assn. consisting of 32 members)	No	No	No
Florida Home Builders Assn.	No	No	No
Associated General Contractors	No	No	No
Florida Power Corp.	N/A	N/A	Yes

2. Is there Insufficient Protection without Regulation?

In many cases, permitting authorities require plans submitted to them to be sealed by a licensed engineer, geologist, land surveyor, or landscape architect. These licensed persons may employ various other unlicensed persons as contributors toward the plans that they seal. The persons they employ, and whom they rely upon when putting together these plans or assessments, may have academic credentials or may possess voluntary certifications issued by private organizations, but neither is required.

By requiring state licensed individuals to seal the plans, it appears that some accountability and public protection already exists to an extent, in some cases. In other words, by assuming responsibility for the overall plan or assessment, the licensed person is made responsible for the quality of the work. Any complaints for substandard work could be processed against the licensed individual. Therefore, the licensed individual is acutely motivated to ascertain the competency of any prospective employee.

However, as previously noted, all environmental management work does not have a permit requirement Additionally, the proponents allege that even in those cases where a permit is required, and a licensed person "seals" the plans, sometimes the licensed person is not actually qualified to judge the quality of all of the environmental management work, even though he is responsible for it and will be held accountable for it.

The Florida Home Builders Association made the following comment with regard to the present system of environmental permitting:

> (The state has already protected the public) by creating a complex web of interlocking environmental permits....The state has determined that a command and control system of environmental permitting will result in the goal of adequate environmental protection. If the Legislature determines that current environmental regulations are not adequate, then the appropriate response is to change the permitting criteria.

Also, several private industry practitioners pointed out that the potential for civil suit on large projects already cause the development or construction interests who select the environmental professionals to assess their qualifications very carefully. They asserted that these civil liability concerns significantly protect the public without the need for licensure..

As noted in the previous survey findings, most of the non-government developers and trade associations indicated that they need no help from licensure to assist in their hiring of competent environmental professionals. Also, the overwhelming majority of such groups opposed licensure. An attempt was made to survey environmental interest groups identified by the proponents, but none responded to the survey.

3. Will Regulation Accomplish Protection?

Regulation would provide a mechanism to process complaints against persons performing environmental management in an incompetent or fraudulent manner.

However, one difficulty in actually disciplining these persons once they are licensed might be, as expressed by the proponents, that "there is rarely a smoking gun." This comment by the proponents is understood to mean that a "direct line" of accountability is difficult to assess in many instances. Obviously, difficulty in establishing direct accountability for the failure of environmental management could tend to undermine successfully accomplishing discipline against any practitioners in an instance of sub-standard or incompetent work.

Still, on balance, it should be assumed that persons submitting demonstrably erroneous or incompetent plans, could be disciplined, and that this would protect the public to an extent.

4. What Will Be the Economic Impact of Regulation?

a. To the Public

As a rule, licensing tends to drive up the price the consuming public is charged for the service. By limiting the supply of a service, the "law of supply and demand" asserts that the service will tend to cost more to those purchasing that service. The question is whether that increase in cost will be balanced by the savings gained from a higher quality of service being provided.

The proponents assert that trade associations, development interests, and construction interests (as primary consumers of the service), will benefit economically from not having to pay for the service twice because it was done incompetently the first time. The proponents also assert that if government agencies employed licensed environmental professionals, and evaluated work produced by licensed environmental professionals, then their work would be completed more effectively and efficiently, with a concurrent economic savings to the taxpayer.

b. To the Regulated Profession

The primary administrative costs of establishing regulation are borne by the group which is regulated. In general, the costs for application processing, and for establishing and maintaining the disciplinary infrastructure are designed to be offset by the licensure fee revenue received.

In the proposal under review, a seven member board would be established. The Department of Business and Professional Regulation indicates the cost of regulation, assuming 2,000 licensees the first year, and 1,000 licensees each of the next two years, would be as follows:

Salaries and Benefits

CLASS TITLE		FTE	RATE
Professional Regulation Spec. I		2.00	$34,747
Professional Regulation Spec. II		1.00	$19,504
Salaries and Benefits			$79,369
First Yr. Lapse @ 25%			$59,527
	95-96	96-97	97-98
Subtotal Salary/Benefits	$ 59,527	$ 81,750	$84,202
OTHER PERSONAL SERVICES			
Board Member Compensation 7 members, 6 2 day meetings	$ 4,200	$ 4,200	$ 4,200
Attorney General	$13,000	$13,000	$13,000
Subtotal OPS	$17,200	$17,200	$17,200
EXPENSES			
Expense Standard:			
Professional @ $9241	$ 9,241	$ 9,703	$10,188
Clerical @ $7493	$14,986	$15,735	$16,522
Printing, Distribution, and Legal Notices for Rules	$ 2,550	$ 0	$ 0
Board Travel 7 members/2 staff + air each - 6 meetings	$24,300	$24,300	$24,300
Site rental 6 sites @ $1,250 each	$ 7,500	$ 7,500	$ 7,500
Supplies/printing/postage/data processing	$ 6,257	$ 6,257	$ 6,257
Overhead costs @ 10% (all categories)	$28,379	$28,532	$29,469
Subtotal expenses	$93,213	$92,027	$94,236

OPERATING CAPITAL OUTLAY

		95-96	96-97	97-98
OCO Standard:				
STD per FTE $8243		$24,729	$ 0	$ 0
Subtotal OCO		$24,729	$ 0	$ 0
Complaints, investigation, prosecution (Based upon comparable profession)	$107,500	$112,875	$118,519	
DOAH		$ 3,000	$ 3,000	$3,000
Licensure		$ 7,000	$ 7,000	$ 7,000
		$312,169	$313,852	$324,157

Revenue Projected		Number	95-96 Amount
Application Fees @	$100	2000	$200,000
Initial @	$100	2000	$200,000
Renewal Fees @	$100	0	$ 0
Revenue Projected		Number	96-97 Amount
Application Fees @	$100	1000	$100,000
Initial @	$100	1000	$100,000
Renewal Fees @	$100	0	$ 0
Revenue Projected		Number	97-98 Amount
Application Fees @	$100	1000	$100,000
Initial @	$100	1000	$100,000
Renewal Fees @	$100	3000	$300,000

These department figures project that a $100 application fee and a $100 biennial (once every two years) will provide sufficient funds for regulation.

E. The Regulatory Alternatives

There are three basic forms of regulation:

1) Licensure (mandatory) -- This is a "practice act" form of regulation. Anyone wishing to practice the regulated activity must become licensed. Licensure also usually entails entrance requirements consisting of education, experience, or examination (or any combination thereof).

2) Registration (mandatory) -- This is also a "practice act" form of regulation, requiring anyone wishing to practice the regulated activity to become registered. It differs from mandatory licensure in that no or only an absolute minimum of entrance requirements are imposed, other than payment of a fee and provision of certain information. Sometimes a minimalist requirement such as provision of insurance or assurance of no criminal history is imposed, but education, experience, or examination requirements are generally not part of the regulatory scheme. If those sorts of entrance requirements are imposed, the regulation becomes, in effect, mandatory licensure.

3) Certification (voluntary) -- Persons who are not certified may engage in the very same activity (practice) as someone who is certified; however, they may not refer to themselves as certified or refer to themselves by any other term which has been held as deceiving the public as to their qualifications or lack thereof. Certification usually imposes entrance requirements similar to licensure -- education, experience, and testing.

Mandatory licensure is the most restrictive of the three, because it provides significant entry requirements prior to licensure, and prohibits the practice of the activity except for those who obtain licensure. Registration is the next most restrictive because it prohibits the practice of the activity, except for those who obtain registration, but does not impose significant entry requirements. Certification is the least restrictive because those who are not certified may still continue to practice the activity.

Voluntary certification is the form of regulation which currently exists for environmental professionals. However, it is voluntary certification administered by private organizations, rather than by a government agency. Mandatory licensure is what the proponents are proposing.

The third alternative is registration, one drawback to establishing registration (licensure without education, training, or testing requirements, but having complaint processing and discipline available once a registration is issued) is that the state would be issuing a license to someone who may not, in fact, be qualified to practice. Most members of the public assume that a state-issued license means that they can trust the holder of the license to be at least minimally qualified. Registration is therefore an alternative, but one with a serious "defect."

V. Conclusions

The Sunrise Act requires that the Legislature consider four basic factors before determining that regulation is needed. Those factors are:

1) **Will the unregulated practice of the profession or occupation substantially harm or endanger the public health, safety, or welfare and is the potential for harm recognizable and not remote?**

This report concludes that the unregulated practice of environmental management does not substantially harm or endanger the public health, safety, or welfare.

While the proponents provided a handful of examples of problems which might have been mitigated or prevented by licensure, virtually all of the local governments, state agencies, and interested parties failed to provide any instances of harm to the public from the unlicensed practice of environmental management. Even the state or local agencies which indicated support for licensure failed to provide any instances of harm.

Four or five instances of harm over a period of at least 10 years relating to the unregulated practice of environmental management simply does not represent a significant number of instances of harm for a profession having thousands of practitioners.

Also, it should be noted that it would be reasonable to expect that the state or local agencies which issue environmental permits would be in a position to accurately evaluate the need for licensure, and would support licensure if it was needed to protect the public. Yet, most of those bodies oppose licensure.

2) **Does the practice of the profession or occupation require specialized skill or training, and is that skill or training readily measurable or quantifiable so that examination or training requirements would reasonably assure initial and continuing professional or occupational ability?**

Yes, the skill is measurable and testable. Testing and disciplining of licensed persons would reasonably assure continued professional ability.

3) Can the public be effectively protected by other means?

Yes. To a great extent, the current availability of privately administered voluntary certification plans and an examination of the academic credentials and work experience of the prospective employee already enable the employer to judge the qualifications of the environmental professional.

This conclusion is bolstered by the fact that neither the state and local agencies, nor the various elements of industry who employ the environmental professionals, indicated that licensure was needed to provide them assurance of competency. Even the state or local agencies which support licensure conspicuously argued that their employees should not be subjected to the licensure requirements they proposed for others.

Also, accountability already exists in many instances due to the fact that permitting agencies often require plans to be certified or "sealed" by a licensed professional engineer or licensed professional geologist. Once the plans are sealed and submitted, the permitting agency personnel then reviews the plans, providing a further assurance of protection.

The fact that some plans are required to be sealed by a licensed professional means that in those instances, the current system already requires a licensed professional to assume responsibility for accuracy and competency of the final product, including the work of the environmental management personnel.

This is somewhat similar to the regulatory design for accomplishing public protection found in the field of construction contracting. In that field, a general contractor, building contractor, or residential contractor is responsible for the entire project, including skilled specialty work performed by unlicensed persons. The licensed contractor may -- or may not -- know how to do this work himself, and may or may not be able to judge its competency by examining that work. However, whether he is competent to easily judge the proficiency of it -- or not -- he knows he is nevertheless responsible for it. Therefore, just as the licensed contractor will be responsible for the specialty work done by unlicensed persons (and is thereby motivated to see that it is done well), the engineer or geologist sealing the plan is accountable for the work of the environmental management person (and will similarly seek to be sure that it is done well). In each instance, the fact that the licensed person assumes responsibility for the work of unlicensed personnel working under his authority serves to provide a significant protection to the consumer.

It should be noted, however, that not all environmental management work is done under the authority of a licensed professional, and that therefore, this protection is not available in all instances.

4) **Will the overall cost-effectiveness and economic impact of the proposed regulation, including the indirect costs to consumers, be favorable.**

The proponents argue that industry and government will experience an overall savings, because the work will be of a higher quality, and will therefore not have to be re-done to correct substandard initial work. Overwhelmingly, the state and local governments agencies and interested parties providing input disagree, and assert that their cost will substantially increase if mandatory licensure is established.

Since there is not sufficient information to indicate that a large percentage of current environmental management work is done incompetently and requires being re-done, this report concludes that the higher costs which inevitably result from licensure will not be cost-effective.

VI. Recommendations

Based on the findings and conclusions in this report, there is not sufficient evidence to establish that the unregulated practice of this activity will result in significant and discernible harm. Therefore, the criteria for recommending licensure according to section 11.62, Florida Statutes, are not met, and this report does not recommend mandatory licensure for environmental professionals.

VII. Appendix

FLORIDA HOUSE OF REPRESENTATIVES
COMMITTEE ON BUSINESS AND PROFESSIONAL REGULATION

SUNRISE QUESTIONNAIRE

INSTRUCTIONS FOR COMPLETING THIS QUESTIONNAIRE:

Regulation of professions is mandated by the Legislature only for the preservation of the health, safety, and welfare of the public. The criteria for regulating a profession is set forth in various sections of chapter 455, Florida Statutes. Chapter 455 governs all professions regulated by the Department of Business & Professional Regulation. If the Legislature authorizes regulation of your profession, you will be subject to the provisions contained in this chapter, as well as your individual practice act. Nothing in your practice act should conflict with chapter 455, Florida Statutes. Please familiarize yourself with this chapter prior to submitting proposed Sunrise legislation.

This questionnaire is designed to obtain information which will aid the Legislature in determining the need for regulation of your profession and in analyzing proposed legislation seeking to establish the regulation of your profession under the Department of Business & Professional Regulation. Your cooperation in completing it will be greatly appreciated.

Each part of every question must be addressed. If there is no information available to answer the question, please state this as your response and describe what you did to attempt to find information that would answer the question. If you think the question is not applicable, please state this and explain your response.

When supporting information is appropriate, it should be included as an appendix and labeled accordingly. References within the main document to information contained in the appendices should be properly labeled.

Please read the entire questionnaire before answering any questions so that you will understand what information is being requested and how questions relate to each other.

QUESTIONNAIRE

Section A. - Legislative History

1. What is the history of regulation or attempts at regulation of this group? For example, has this profession ever been regulated and subsequently deregulated? Has legislation requiring regulation been filed in the past? Has legislation requiring regulation passed and been vetoed? Please explain why the regulation was sunset, why bills did not pass or why legislation was vetoed.

Section B. - Applicant Group Identification

This section of the questionnaire is designed to help identify the group seeking regulation and to determine if the applicant group adequately represents the occupation.

2. What occupational group is seeking regulation? Identify by name, address, phone number, and associational affiliation the individuals who should be contacted when communicating with this group regarding this questionnaire.

3. List all titles currently used by Florida practitioners of this occupation. Estimate the total number of practitioners now in Florida and the number using each title. Document.

4. Identify each occupational association or similar organization representing current practitioners in Florida and estimate its membership. Please provide membership lists to document the numbers of people in these associations. List the names of any associated national group.

5. Estimate the percentage of practitioners who support this request for regulation. Document the source of this estimate.

6. Name the group or individual representing the practitioners in this effort to seek regulation. How was this group or individual selected?

7. Are all practitioner groups listed in response to questions represented in the organization or by the individual seeking regulation? If not, why not?

Section C. - Consumer Group Identification

This section is designed to identify consumers who typically seek practitioner services and to identify groups, outside of those seeking regulation, with an interest in the proposed regulation.

8. Do practitioners typically deal with a specific consumer population? Are clients generally individuals or organizations? Document.

9. Identify any advocacy groups representing Florida consumers of this service, e.g., AARP. List also the name of any applicable national advocacy groups.

10. Identify the consumer populations not now using practitioner services who will be likely to do so, if regulation is approved.

11. Name any groups who will oppose this proposed regulation or others with an interest in this proposed regulation. If there are none, indicate efforts made to identify them.

Section D.

I. The unregulated practice of this occupation will harm or endanger the public health, safety, and welfare.

12. Is there or has there been significant public need and demand for a regulatory standard? Document. If not, what is the basis for seeking regulation?

13. What harm to the public has occurred as a result of the un-regulated practice of this profession? What is the nature and severity of the harm? Document the physical, social, intellectual, financial, health, safety, and welfare threat to the consumer if this practice goes unregulated.

14. How likely is it that harm will occur? Cite cases or instances of consumer injury and the estimated number of these injuries. If there are none, how is harm currently avoided?

15. What are the estimated numbers of complaints against professionals practicing this profession? (Some information can be obtained from the Department of Agriculture, Division of Consumer Services or the State Attorney's Office.)

16. What provisions of the proposed regulation would protect the consumer from injury?

II. Existing protection available to the consumer is insufficient.

17. To what extent do consumers currently control their exposure to risk? How do clients locate and select practitioners?

18. Are clients frequently referred to practitioners for services? Give examples of referral patterns.

19. Are clients frequently referred elsewhere by practitioners? Give examples of referral patterns.

20. What sources exist to inform consumers of the risk inherent in incompetent practice and of what practitioner behaviors constitute competent performance?

21. What administrative or legal remedies are currently available to redress consumer injury and abuse in this field?

22. Are the currently available remedies insufficient or ineffective? If so, please explain.

III. No alternatives to regulation will adequately protect the public.

23. Explain why marketplace factors will not be as effective as governmental regulation in ensuring public welfare. Document specific instances in which market controls have broken down or proven ineffective in assuring consumer protection.

24. Are there other states in which this occupation is regulated? If so, identify the states and indicate the manner in which consumer protection is ensured in those states. Provide as an appendix copies of the regulatory provisions from these states.

25. What means other than governmental regulation have been employed in Florida to ensure consumer health, safety, and welfare? Show why the following would be inadequate:

(a) code of ethics
(b) codes of practice enforced by professional associations
(c) dispute-resolution mechanisms such as mediation or arbitration
(d) recourse to current applicable law
(e) regulation of those who employ or supervise practitioners
(f) caveat emptor, i.e., "let the buyer beware"
(g) other measures attempted

26. If a "grandfather" clause (in which current practitioners are exempted from compliance with proposed entry standards) will be allowed, how is that clause justified? What safeguards will be provided to consumers regarding this group?

IV. Regulation will mitigate existing problems.

27. What specific benefits will the public realize if this occupation is regulated? Indicate clearly how the proposed regulation will correct or preclude consumer injury. Do these benefits go beyond freedom from harm? If so, how?

28. Which consumers of practitioner services are most in need of protection? Which require least protection? Which consumers will benefit most and least from regulation?

29. Provide evidence of "net" benefit when the following possible effects of regulation are considered:

(a) restriction of opportunity to practice
(b) restricted supply of practitioners
(c) increased cost of services to consumers
(d) increased governmental intervention in the marketplace

V. Practitioners operate independently, making decisions of consequences.

30. To what degree do individual practitioners make professional judgements of consequence? What are these judgements? How frequently do they occur? What are the consequences? Document.

31. To what extent do practitioners work independently, as opposed to working under the auspices of an organization, an employer, or a supervisor?

32. To what extent do decisions made by the practitioner require a high degree of skill or knowledge to avoid harm?

VI. Functions and tasks of the occupation are clearly defined.

33. Does the proposed regulatory scheme define a scope of activity which requires licensure, or merely prevent the use of a designated job title or occupational description without a license? Explain.

34. Describe the important functions, tasks, and duties performed by practitioners. Identify the services and/or products provided.

35. Is there a consensus on what activities constitute competent practice of the occupation? If so, state and document. If not, what is the basis for assessing competence?

36. Is such competent practice measurable by objective standards such as peer review? Give examples.

37. Specify activities or practices that would suggest that a practitioner is incompetent. To what extent is public harm caused by personal factors such as dishonesty? Document.

VII. <u>The occupation is clearly distinguishable from other occupations that are already regulated.</u>

38. What similar occupations have been regulated in Florida? Is it the business practice that needs to be regulated or the individual providing the service? Explain and give examples.

39. Describe functions performed by practitioners that differ from those performed by occupations listed in the above question.

40. What is the relationship among those groups listed in response to question 38 and practitioners? Can practitioners be considered a branch of a currently regulated occupation?

41. What impact will the requested regulation have upon the authority and scope of practice of currently regulated groups?

42. Are there unregulated occupations performing services similar to those of the group to be regulated? If so, estimate those numbers of unregulated practitioners.

43. Describe the similarities and differences between practitioners and the groups identified in the above question.

44. Will this legislation create confusion in the marketplace regarding who is licensed and who is not?

45. Will this generate scope of practice or unlicensed activity complaints?

VIII. The occupation requires possession of knowledge, skills, and abilities that are both teachable and testable.

46. Is there a generally accepted core set of knowledge, skills, and abilities without which a practitioner may cause public harm? Describe and document.

47. What methods are currently used to define the requisite knowledge, skills, and abilities? Who is responsible for defining them?

48. Are those skills, abilities, and knowledge testable? Is the work of the group sufficiently defined that competence could be evaluated by some standard (i.e.: ratings of education, experience, or exam performance)? Is there a National Exam given to test this skill, ability, and knowledge level? What is the name of the test and the name and address of the testing service who has developed and offers this exam?

49. List institutions and program titles offering accredited and non-accredited preparatory programs in Florida. Estimate the annual number of graduates from each. If there are no such programs in Florida, list programs found elsewhere. Will out-of-state programs be recognized? How?

50. Apart from the above listed programs, indicate various methods of acquiring the required knowledge, skills, and ability such as apprenticeships, internships, on the job training, etc.

51. Estimate the percentage of current practitioners trained by each of the routes described in questions 49 and 50.

52. Does any examination or other measure currently exist to test for functional competence in this profession? If so, indicate how and by whom each was constructed and by whom it is currently administered. Include the name, address, and phone number. If not, indicate search efforts to locate such method.

53. Describe the format and content of each examination listed in question 52. Describe the sections of each examination. What competencies is each designed to measure? How do these relate to the knowledge, skills, and abilities listed in question 44?

54. If more than one examination is listed above, which do you intend to support, if any? Why? If none of the above, why not and what do you propose as an alternate?

Economic Impact

55. How many people are exposed annually to this occupation? Will regulation of the occupation affect this figure? If so, in what way?

56. What is the current cost of the service provided? Estimate the amount of money spent annually in Florida for the services of this group. How will regulation affect these costs? Provide documentation for your answers.

57. Outline major governmental activities you believe will be necessary to appropriately regulate practitioners.

    Some examples:

    (a) regulation by a newly created board, regulation by an existing board, or regulation by the department. (If an existing board is applicable, please identify that board);
    (b) credentials and licensure requirements review;
    (c) examination development and administration;
    (d) licensure renewal;
    (e) enforcement of the law: complaints, investigations, prosecution, inspections, etc.;
    (f) continuing education, approval and school accreditation, etc.

58. How many practitioners are likely to be certified if regulation is approved? Document.

59. How many practitioners are expected to apply each year if regulation is adopted? Document.

60. If small numbers will apply in answers to 54 and 55, how are costs justified?

61. Does adoption of the requested regulation represent the most cost-effective form of regulation? Indicate alternatives considered and costs associated with each.

Section E. - <u>Proposed Legislation</u>

62. Attach a draft of the legislation proposing new regulation. Please include:

    (a) whether or not a board will be established;
    (b) what background, education, and experience will be required;

(c) if an examination must be successfully completed;
(d) if a grandfather clause will be implemented and what the deadline date will be;
(e) what actions will be prohibited and what disciplinary measures will be allowed.

You are welcome to review any statute regulating a profession under DPR in order to draft legislation consistent with existing statutes. A list of professions and their corresponding statute number is enclosed (Attachment 1).

We will assist you in developing the fee schedule for your legislative draft once this questionnaire is completed and a fiscal impact analysis can be done based on the information provided in this questionnaire.

If you have any questions or need assistance, please contact the Business & Professional Regulation Committee at (904) 488-0996 or SC 278-0996.