

## HOUSE OF REPRESENTATIVES STAFF ANALYSIS

**BILL #:** CS/CS/HB 223 Professional Geology

**SPONSOR(S):** Government Operations Appropriations Subcommittee; Business & Professional Regulation Subcommittee; Combee; Porter

**TIED BILLS:** **IDEN./SIM. BILLS:** CS/SB 404

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
1) Business & Professional Regulation Subcommittee	12 Y, 0 N, As CS	Brown-Blake	Luczynski
2) Government Operations Appropriations Subcommittee	12 Y, 0 N, As CS	Topp	Topp
3) Regulatory Affairs Committee			

### SUMMARY ANALYSIS

Currently, applicants for licensure as a professional geologist must meet educational requirements and then obtain at least five years of work experience prior to applying for licensure and taking the required examination. The passage rate for the fundamentals of geology part of the examination, which tests the knowledge and skills acquired from college curriculum, is approximately 50 percent.

The bill creates a geologist-in-training registration. The geologist-in-training applicant must meet the same geological coursework and background requirements as a professional geologist licensure applicant. If an applicant for registration meets the requirements and is certified by the Board of Professional Geologists as qualifying, the applicant is then able to take the fundamentals of geology part of the licensure examination. By permitting individuals to take the fundamentals of geology part of the licensure examination upon completion of the geological coursework education requirements, the passage rate for that part of the examination may increase.

The geologist-in-training registration is optional. Individuals desiring to be licensed as a geologist may still wait to take the fundamentals of geology part of the examination with the rest of the examination upon meeting all eligibility requirements, including completion of the required work experience.

The bill requires the Department of Business and Professional Regulation (Department) to register as a geologist-in-training each applicant who meets the requirements and successfully completes the fundamentals of geology part of the examination. Furthermore, the bill updates licensure requirements as professional geologists, clarifying that the applicants must obtain five years of work experience prior to licensure and updating the hours of coursework necessary to meet national standards.

The Department of Business and Professional Regulation indicates that the bill will have minimal, but indeterminate costs that can be absorbed with existing resources. The Department estimates revenues as a result of the bill will likely range from \$6,750 to \$22,500.

The effective date of the bill is January 1, 2015.

# FULL ANALYSIS

## I. SUBSTANTIVE ANALYSIS

### A. EFFECT OF PROPOSED CHANGES:

#### Current Situation

##### Current Examination for Licensure As Professional Geologist

The Board of Professional Geologists (Board) was established as a board under the Division of Professions, a division of the Department of Business and Professional Regulation (Department).<sup>1</sup> In order to be licensed as a professional geologist by the Board, applicants must meet a number of education and experience requirements prior to obtaining passing scores on a written licensure examination, which is designed to test an applicant's qualifications to practice professional geology.<sup>2</sup> The Board has the authority to approve by rule the use of a national examination for a licensure examination.<sup>3</sup>

The Board is a member of the National Association of State Boards of Geology ("ASBOG"), which acts to serve as a connective link among the individual state geological registration licensing boards for the planning and preparation of uniform procedures and the coordination of geologic protective measures for the general public.<sup>4</sup> ASBOG is not a regulatory body and does not license geologists.<sup>5</sup> It is a national organization which provides guidance for the licensure and regulation of professional geologists. ASBOG also develops standardized written examinations for determining qualifications of applicants seeking licensure as professional geologists.<sup>6</sup>

The Board has adopted a standardized written test developed by ASBOG.<sup>7</sup> The test has two parts, specifically adopted by the Board for use as the licensure examination. The parts consist of the Fundamentals of Geology part and the Practice of Geology part.<sup>8</sup> The Fundamentals of Geology part of the examination emphasizes the knowledge and skills typically acquired in an academic setting and that leads to a baccalaureate degree.<sup>9</sup> The Practice of Geology part of the examination emphasizes skills and knowledge acquired or expanded in a practice or job setting.<sup>10</sup>

##### Licensure by Examination Requirements for Professional Geologists

Applicants for licensure as a professional geologist must first apply to take the examination for licensure. The Board must review their application to determine whether the applicant is qualified to take the examination. If the Board finds the applicant is qualified to take the examination, the Board certifies to the Department that the applicant is able to take the examination. The Department will administer the examination to each applicant that the Board certifies:<sup>11</sup>

- Has completed and submitted an application form with a nonrefundable application fee and examination fee,<sup>12</sup> which is refundable if the applicant is found to be ineligible to take the examination.
- Is at least 18 years of age.

---

<sup>1</sup> Section 20.165, F.S.

<sup>2</sup> Section 492.105(1), F.S.

<sup>3</sup> Section 455.217(1)(d), F.S.

<sup>4</sup> National Association of State Boards of Geology, *Mission Statement*, available at <http://www.asbog.org/> (last visited January 16, 2014).

<sup>5</sup> *Id.*

<sup>6</sup> *Id.*

<sup>7</sup> Rule 61G16-6.001(2), F.A.C.

<sup>8</sup> Rule 61G16-6.001(3), F.A.C.

<sup>9</sup> National Association of State Boards of Geology, *ASBOG Professional Geologist Candidate handbook, 4 (2013)*, available at <http://www.asbog.org/Documents/1309%20Candidate%20Handbook.wpd.pdf> (last visited January 16, 2014).

<sup>10</sup> *Id.*

<sup>11</sup> Section 492.105(1), F.S.

<sup>12</sup> Rule 61G16-3.001, F.A.C., sets the application fee at \$150.00 and the examination fee at \$250.00.

- Has not committed any act or offense in any jurisdiction which constitutes a basis for disciplining a professional geologist licensed pursuant to Chapter 492, F.S.
- Has graduated with a major in geology or related science acceptable by the Board from a college or university where the geological curricula has met the criteria established by an accrediting agency recognized by the United States Department of Education.
- Has completed at least 30 semester hours of geological coursework,<sup>13</sup> 24 of which must be at the third or fourth year or graduate level, at a college or university where the geological curricula has met the criteria established by an accrediting agency recognized by the United States Department of Education.<sup>14</sup>
- Has at least seven years of professional geological work experience, which shall include minimum of three years of professional geological work under the supervision of a licensed geologist or professional engineer registered under Chapter 471, F.S.; or have a minimum of five accumulative years' experience in responsible charge of geological work.<sup>15</sup> This experience shall have been demonstrated by the applicant having performed the work in a responsible position as determined by the Board.<sup>16</sup> Applicants can substitute time obtaining an education or teaching and research work towards field work as follows:
  - Each year of undergraduate study in geological sciences shall count as one-half year experience, up to a maximum of two years.
  - Each year of graduate study shall count as one year of experience.
  - Credit for undergraduate study, graduate study, and graduate courses, individually or in any combination, shall not exceed a total of two years towards meeting the experience requirements.
  - Full time teaching or research is credited year for year towards meeting the seven years requirements.

Once the applicant achieves a score of 70 percent or better for both parts of the examination,<sup>17</sup> the applicant is able to obtain a license as a professional geologist.

### Current Examination Results

Because applicants are able to use up to two years of undergraduate work towards the required work experience, the typical time between graduation and being eligible to apply to take the examination is five years. The pass rate of applicants from Florida for the Fundamentals of Geology part of the examination is approximately 50 percent.<sup>18</sup> The percentage of failure increases the further applicants are removed from their education.<sup>19</sup> The passage-rate nationwide for the Fundamentals of Geology part of the examination for March of 2012, October of 2012, March of 2013, and October of 2013, were 57, 63, 63, and 64 percent, respectively.<sup>20</sup>

### Geologists-in-Training

---

<sup>13</sup> Rule 61G16-5.002, F.A.C., states that geological coursework comprises “the basic fundamental core program of geology” and provides a list of possible courses.

<sup>14</sup> The list for accrediting agencies recognized by the United States Department of Education may be found at [http://www2.ed.gov/admins/finaid/accred/accreditation\\_pg6.html](http://www2.ed.gov/admins/finaid/accred/accreditation_pg6.html) (last visited January 16, 2014).

<sup>15</sup> Rule 61G16-1.009(1), F.A.C., defines “responsible charge” to mean “one who is accountable for and exercises direct control and personal supervision of one self’s and others’ geological work with initiative, skill and independent scientific judgment.”

<sup>16</sup> Rule 61G16-1.009(2), F.A.C., defines “responsible position” as “a position in which one performs geological work with initiative, skill and independent judgment, under the supervision and direction of a professional geologist licensed under Chapter 492, F.S., a professional engineer licensed under Chapter 471, F.S., or other qualified professional.”

<sup>17</sup> Rule 61G16-6.001(3), F.A.C.

<sup>18</sup> *2014 Department of Business and Professional Regulation Legislative Bill Analysis, HB 223*, Department of Business and Professional Regulation, (December 2013).

<sup>19</sup> *Id.*

<sup>20</sup> National Association of State Boards of Geology, *FG & PG Examination Statistics*, available at [http://www.asbog.org/Documents/FG%20%20PG%20Exam%20Statistics%20\(Mar%202008%20-%20Oct%202013\).pdf](http://www.asbog.org/Documents/FG%20%20PG%20Exam%20Statistics%20(Mar%202008%20-%20Oct%202013).pdf) (last visited January 16, 2014).

Florida does not currently have a geologist-in-training registration. In 2005, ASBOG produced The Professional Geologist Model Licensure Law (Model Law) which provided a model for the geologist-in-training registration qualifications. A number of states have adopted the aforementioned model language and provide for a geologist-in-training registration or equivalent. The qualifications that must be met prior to “enrollment” as a geologist-in-training as found in the Model Law include the following:

- a) Graduation from a course of study in geology satisfactory to the Board from an accredited college or university, or from a program accredited by an organization recognized by the Board, of four (4) or more years and which includes at least thirty (30) semester hours or forty-five (45) quarter hours of credit in geological course work suitable to the Board, with a major in geology or geological specialty;
- b) Successful passage of a national examination on the fundamentals of geology and any other jurisdictional examinations in geology as determined and prescribed by the Board; and,
- c) Other requirements as may be established in rules and regulations by the Board including that said applicant for enrollment possesses a degree in geology as specified in this section prior to being allowed to sit for any examination.<sup>21</sup>

### **Effect of the Bill**

#### **Examination for Licensure as Professional Geologist**

##### *Multi-Part Examination:*

The bill amends s. 492.105(1), F.S., to permit the Board to adopt a multi-part examination for licensure. The rulemaking authority under s. 492.104(2), F.S., is amended to permit the Board to adopt fees apportioned to each part of the multi-part examination. This allows the Board to split the examination fee up for each part of the examination the applicant takes.

##### *Fundamentals of Geology:*

The bill further amends s. 492.105(1), F.S., to include fundamentals of geology in the required topics to be examined in the required licensure examination. Currently, the Board has adopted an examination developed by ASBOG that can be split into two parts. One of the parts is a discrete part of the examination testing on the fundamentals of geology, which currently tests on the knowledge and skills typically acquired in an academic setting.<sup>22</sup>

#### **Licensure Requirements for Professional Geologists**

##### *Coursework Requirements Updated:*

The bill amends s. 492.105(1)(d)2., F.S., to update coursework requirements for licensure to include 45 quarterly hours, providing licensure parameters for applicants from colleges with a quarter-based course schedule. Furthermore, the bill removes the requirement that 24 of the 30 required semester hours necessary to obtain licensure by examination be at the third or fourth collegiate year or graduate level coursework.

##### *Work Experience Requirements Updated:*

The bill amends s. 492.105(1)(e), F.S., by lowering the work experience requirement from seven years to five “verified” years total and removes the ability to substitute time obtaining a graduate or undergraduate education, researching, or teaching for the required work experience. Lowering the experience requirement from seven years to five years but removing the ability to obtain that

---

<sup>21</sup> National Association of State Boards of Geology, *The Professional Geologist Model Licensure Law*, Section 22 at p. 29 (Dec 2005), available at <http://www.asbog.org/Documents/Model%20Law%2012-2-05.pdf> (last visited January 20, 2014).

<sup>22</sup> See *supra* note 9.

experience through education results in no actual net change in the experience requirements. Currently applicants must obtain five years of experience following graduation with a degree in geology or related science from an accredited college or university. The bill will still require five years of experience following graduation with a degree in geology or related science from an accredited college or university.

The bill clarifies that work performed to meet the five years of work experience requirement must be verified geological work which includes one of the following:

- A minimum of three years of professional geological work under a licensed geologist or professional engineer; or
- A minimum of five accumulative years in responsible charge of geological work as determined by the Board.

The bill permits the Board to set parameters for the work that qualifies as responsible charge of geological work. This language clarifies that applicants can obtain the experience under the guidance of a licensed professional geologist or engineer. If the applicant is from a state that does not license geologists, he or she can still qualify for licensure if he or she can show experience in the geological field by being “accountable for and exercis[ing] direct control and personal supervision of one self’s and others’ geological work with initiative, skill, and independent scientific judgment.”<sup>23</sup> Finally, the bill language amends s. 492.105(e), F.S., to remove the applicant’s ability to demonstrate experience by his or her having performed work in a “responsible position as determined by the Board.” The effect of this removal is minimal, as the definition for “responsible position”<sup>24</sup> is nearly identical to that of “responsible charge” and is applied in the same manner by the Board.

### Geologists-in-Training

The bill creates s. 492.1051, F.S., creating geologist-in-training registration and requirements. The geologist-in-training registration is not mandatory for all individuals wishing to eventually become licensed as a professional geologist. Rather, the creation of the geologist-in-training registration permits an applicant who chooses to, to sit for the fundamentals of geology part of the examination prior to obtaining the five years required work experience. The bill requires the Department to administer the fundamentals of geology part of the licensure examination for any applicant for registration as a geologist-in-training who the Board certifies:

- Has completed an application form and remitted an application fee and an examination fee.
- Has not committed an act or offense in any jurisdiction which constitutes grounds for disciplining a professional geologist.
- Has successfully completed at least 30 semester hours or 45 quarter hours of geological coursework at an accredited college or university, and, if still enrolled, has provided a letter of good standing from the college or university.

The Department is required to register all applicants who the Board certifies has passed the fundamentals of geology part of the licensure examination. Upon graduation from the college or university and completion of the professional experience set forth in s. 492.105, F.S., the geologist-in-training may then apply to take the examination for licensure as a professional geologist. However, the geologist-in-training will not be required to retake the part of the examination that tests on the fundamentals of geology. By splitting the examination into multiple parts and permitting applicants to take the part that tests on the fundamentals of geology test upon completion of education requirements, the passage rate may improve, providing applicants a better chance of becoming licensed as a professional geologist the first time they take the additional practice of geology part of the examination.

## B. SECTION DIRECTORY:

---

<sup>23</sup> Rule 61G16-1.009(1), F.A.C.

<sup>24</sup> Rule 61G16-1.009(2), F.A.C.

**Section 1** amends s. 492.104(2), F.S., to permit the Board to apportion the examination fee for each part of a multi-part examination, and to permit the examination fee to be refunded in whole or in part if the applicant is found ineligible to take any part of the examination.

**Section 2** amends s. 492.105, F.S., to add fundamentals to required testing standards; permits the written licensure examination to be a multi-part examination; allows applicants for examination to meet educational requirements by obtaining 30 semester hours or 45 quarter hours of geological coursework; changes the experience requirement from seven years of professional experience to five years of verified professional experience; clarifies that applicants may meet the experience requirements by having five accumulative years of verified geological work experience in responsible charge of geological work as determined by the Board; removes the ability to use time spent completing undergraduate studies, graduate studies, research, or teaching towards professional experience requirements; and removes the requirement for applicants to demonstrate their ability by having performed work in a responsible position as determined by the Board.

**Section 3** creates s. 492.1051, F.S., to provide for the registration of geologists-in-training; requires applicants for registration as a geologist-in-training to apply to take a part of the examination that tests the fundamentals of geology; requires the Department to examine any applicant who the Board certifies has completed the application form, paid the application and examination fee, has not committed an offense in any jurisdiction that constitutes grounds for disciplining a professional geologist, and has completed 30 semester hours or 45 quarter hours of geological coursework at an accredited college or university; requires the Department to register any applicant that the Board has certified has passed the fundamentals of geology part of the licensure examination as a geologist-in-training; and requires that a geologist-in-training wishing to become licensed as a professional geologist apply to take the licensure examination, but does not have to retake the fundamentals of geology part of the examination.

**Section 4** provides an effective date of July 1, 2015.

## II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

### A. FISCAL IMPACT ON STATE GOVERNMENT:

#### 1. Revenues:

The Department estimates that approximately 30 to 100 individuals will apply to become a geologist-in-training. Based on the Department estimate of applicants, the revenues as a result of the bill will likely range from \$6,750 to \$22,500 (estimated \$150 exam fee and a \$75 application fee).<sup>25</sup> Section 492.104, F.S., provides that the Board of Professional Geologists sets examination fees by rule. The statute caps examination fees at \$250.

#### 2. Expenditures:

The Department indicates that the bill will have minimal, but indeterminate costs that can be absorbed within existing resources. Expenditures related to implementation of the bill will likely consist of costs for application development, technology changes, and rulemaking. No exam development cost will be incurred as the applicants will take the existing fundamentals part of the national geology exam.<sup>26</sup>

### B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

#### 1. Revenues:

---

<sup>25</sup> 2014 Department of Business and Professional Regulation Legislative Bill Analysis, HB 223, Department of Business and Professional Regulation, December 12, 2013.

<sup>26</sup> 2014 Department of Business and Professional Regulation Legislative Bill Analysis, HB 223, Department of Business and Professional Regulation, December 12, 2013

None.

2. Expenditures:

None.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

Geologist-in training applicants will be required to pay an application and examination fee of an estimated \$225.

D. FISCAL COMMENTS:

None.

### III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

Not Applicable. This bill does not appear to affect county or municipal governments.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

Yes. Rule 61G16-1.009, F.A.C. will need to be amended to remove the term "Responsible position" as the bill removes that language from the statute.

Furthermore, the bill adds an application fee for registration as a geologist-in-training. The Board will need to update Rule 61G16-3.001, F.A.C., to adopt this new application fee.

C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

### IV. AMENDMENTS/ COMMITTEE SUBSTITUTE CHANGES

On February 4, 2014, the Business & Professional Regulation Subcommittee considered a proposed committee substitute and reported the proposed committee substitute favorably with a committee substitute.

The proposed committee substitute made the following changes to the filed version of the bill:

- Updated rulemaking authority to permit the Board to apportion the examination fee for each part of the examination.
- Adds "fundamentals" to the topics which may be tested on the professional geologist licensure examination.
- Permits the written licensure examination for licensure as a professional geologist to be a multi-part examination.
- Permits the experience required for licensure as a professional geologist to be accumulative rather than requiring it be obtained in the five years.
- Permits the board to determine what work experience qualifies as responsible charge of geological work.

- Permits individuals desiring to register as a geologist-in-training to take a discrete portion of the professional geologist licensure examination. The discrete portion of the examination shall test on the fundamentals of geology.

On March 4, 2014, the Government Operations Appropriations Subcommittee considered and adopted one amendment to CS/HB 223 and reported the bill favorably as a committee substitute. The amendment adopted changed the effective date of the bill to January 1, 2015.