Quaternary Geology and Geomorphology Division Self-Evaluation
Submitted to GSA Ad Hoc Committee on Organization on February 24, 2017

Background
The Quaternary Geology and Geomorphology division (QG&G) was established in 1955 and is one of only four divisions established prior to 1971. The QG&G has been a vigorous and ambitious division throughout its history, and remains one of the most active divisions in terms of membership, granting of awards, and sponsorship of technical sessions and field trips. Most importantly, the QG&G provides community and identity for its members of all ages and diverse career paths.

QG&G is a classic “grassroots” division. The division was initiated and is sustained by the vigor and enthusiasm of its membership. QG&G has the fourth largest division membership, reflecting consistent strength and evolution of QG&G-oriented geoscience, in addition to well-organized and committed leadership and involved members.

The QG&G Annual Meeting presence is consistently strong. QG&G typically sponsors 30 to 40 sessions at each Annual Meeting (consistently in the top six divisions in that respect), and sponsors multiple field trips and short courses. For the past ten years, the division has sponsored the Kirk Bryan Field Trip, an enthusiastically attended, day-long excursion intended to examine controversial or otherwise notable field sites, with an intended emphasis on scientific discussion and camaraderie.

The division works with GSA Foundation to manage nine named award accounts. QG&G sponsors five graduate student awards ($1000-$2500), and four professional grants or awards ($1000-$10000) through well-established review processes. The GSA Student Awards Committee selects three additional, QG&G-oriented awards. Recipients of all twelve awards are recognized at the QG&G Awards Ceremony during the Annual Meeting.

In the sections that follow, we respond to the charge from the GSA Ad Hoc Committee on Organization to evaluate our division’s strengths, weaknesses, and ambitions.

The committee asks that each Division and IIG consider its successes, problems, and failures.
1. What are your specific goals for the next five years?
   The QG&G aims to sustain its considerable vigor, and to accomplish several improvements in our operations and service to membership:
   a. Increase conversion of student members to full professional members. The QG&G has an enthusiastic student and early-career member base with which to work. Our total membership has risen since 2008. However, as our student membership has risen, our members and fellows have declined steadily in number through that time. This pattern appears to reflect low retention of student members after graduation. We anticipate that the relatively new early-career membership category will help improve retention of young members, but improving retention will require a variety of strategies.
   b. Increase retention of professional members into and through mid-career.
   c. Increase diversity of QG&G and GSA. Like much of GSA, QG&G finds many challenges in attracting minority members, and in retaining female members through their entire careers. The QG&G has many female members, including several leaders in the field, as well as a strong cadre of female student members. However, the senior-member numbers are strongly male-skewed, reflecting either diminished retention of female members, or the changing demographic of the field over time.
   d. Complete revision and streamlining of our detailed management document (known as the Groundhog Day Document). This document was created in 2000, incorporating earlier documents, to guide the duties and tasks of officers and panelists. While the division operates in an organized and effective fashion through this document, the document requires greater clarity in procedures and annual time lines. A process is currently underway to produce a major revision.
e. Broaden the relevance of the QG&G and GSA to the scientific community. In the USA, scientists working in QG&G-related fields tend to focus on one of three societies: GSA, the American Geophysical Union (AGU), or the American Association of Geographers (AAG). Increasing our linkages with AGU and AAG and our relevance to those segments of the disciplinary community will pay off in terms of increased membership, meeting attendance, and scientific prominence. We can accomplish this goal, in part, by emphasizing disciplinary linkages with the AGU and AAG communities, and the strength of QG&G science within GSA. Further, we can promote the relative logistical ease and lower cost of attending GSA meetings, organizing technical sessions, and offering field trips (which are not a part of the AGU program). AGU in particular has become a very large meeting, at which it can be quite difficult to organize oral sessions and to locate and attend the many concurrent talks and posters.

f. Implement procedures to streamline the QG&G Annual Meeting program to reduce session conflicts. The rich QG&G Annual Meeting program arises from the enthusiasm of the QG&G community to propose strong sessions. However, time conflicts between sessions of overlapping focus areas frustrate some meeting attendees. For the 2017 Annual Meeting, we implemented an online session proposal information system, which allows scientists planning session proposals to view other proposals and to consider merging with other sessions. The system permits division leadership to consider the session proposal constellation as a whole rather than piecemeal, and to identify potential synergies early in the process. The 2017 implementation of this system was moderately successful and identified potential improvements for 2018.

2. What do you see as the challenges to achieving those goals? The QG&G faces many of the challenges that GSA broadly faces as a society in terms of an aging membership, changing financial models, and low diversity. Our specific challenges are:

a. Relevance to the fields of Quaternary Geology and Geomorphology. We remain highly relevant to our membership, but GSA and QG&G are challenged by the size and profile of AGU (see above).

b. Insufficient data and information concerning member views and attitudes. It is challenging to increase retention of student members as they enter their professions, to increase retention of mid-career female members, and to attract ethnically diverse members in the absence of systematic information. We encourage GSA to collect this important membership information through surveys, and to provide that information to divisions. Two types of information are needed. The first need is information on the diversity of the membership. The second need, and the more challenging to develop and address, is data concerning attitudes and views toward diversity in the field. Rigorously collected information could aid divisions and the broader organization strongly in addressing these challenges.

c. Time and energy. The QG&G officers and panelists work hard to maintain and manage a vigorous awards program, a rich and well-organized annual meeting program, and the sense of community that QG&G provides. Our success is reflected in the vigor of the QG&G community. Achieving the goals above, especially those related to membership, will require careful prioritization of goals and the broader enlistment of the membership.

3. How do you currently relate to other Divisions and IIGs? QG&G overlaps in disciplinary range with several divisions and IIGs, including Environmental and Engineering Geology, Structural Geology and Tectonics, Soils and Soil Processes, Karst, Hydrogeology, Archaeological Geology, and others. Most of the interaction between divisions occurs at the member level. Some members belong to QG&G and other divisions, and the divisions cosponsor meeting sessions, field trips, and short courses. We consider these member-level interactions to be the most important.

4. How you see relationships to other Divisions and IIGs changing, if at all, over the next 5 years? We see that relationship changing only slightly, as the interactions are robust.
5. Where do you see your Division/IIG in five years? What support will you need from GSA Headquarters to overcome challenges and meet your goals?

We expect the tradition of a vibrant and enthusiastic division to persist, in particular if we achieve progress on the challenges described in previous sections. The vibrancy and enthusiasm reflect the attitude and commitment of the broader QG&G-oriented science community, and there is no reason to anticipate that the engagement of our members will change.

Most importantly, by 2022 we hope to see our professional membership stabilized and growing, and our ethnic and gender diversity increasing. As our membership pattern reflects GSA as a whole, QG&G can play a leadership role in these efforts. In particular, given our enthusiastic student base, we can help develop strategies for retaining student members and early career professionals as they enter employment. Broader actions by GSA will be reflected in membership trends of QG&G and other divisions. The greatest need for achieving these 5-year goals is information and data on membership, as discussed above.

6. Does the purpose statement in the Division bylaws adequately reflect your Division’s current activities and goals? Two specifics:

- Many Division bylaws have a generalized statement that the Division is to “...advise and assist the officers and committees of the Society in matters pertaining to the Society”. Do you feel that this is correct? If so, do you think your efforts are effective? If not, why?

  Our bylaws reflect our activities and goals appropriately. In particular, the following statement continues to describe how we view the division’s primary purpose:

  “The purpose of the Division is to bring together scientists interested in Quaternary geology and geomorphology, to facilitate presentation and discussion of their problems and ideas, to promote research and publication of results in those fields of geology…”

  Regarding the “advise and assist” statement (“...and to advise and assist the officers and committees of the Society in matters pertaining to Quaternary geology and geomorphology”), we fulfill that role mainly through GSA committees and division leadership channels.

- Second, most Division bylaws have statements relative to the promotion or marketing of their science. Is the science being effectively promoted and communicated? If so how?

  The QG&G accomplishes this primary marketing goal very well, as evidenced in particular by the richness of QG&G-sponsored technical sessions and field trips, by the extensive QG&G awards program, and by the engagement of the QG&G membership in the division and in GSA more broadly.

  One potential area of improvement lies in communication of our science to the broader public. QG&G topics have strong relevance to society, in particular with respect to understanding environmental change, and the division can improve its broader communication. We have taken initial steps in that direction with an active Facebook page (2693 likes) and Twitter account that share news and science stories and division events.